

# Purchasing Week

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\$6 A YEAR U. S. AND CANADA \$25 A YEAR FOREIGN

## ASA Okays First Standards For Family of Van Containers

New York—The American Standards Assn. has formally approved basic dimensions for a family of interchangeable van-size containers. The action gives new impetus to the trend toward containerization in highway, rail, and maritime freight movements.

The ASA standard establishes lengths of 10, 20, 30, and 40-ft. for van containers with 8 ft. x 8 ft. cross sections. It's the first in a proposed series of American standards in the containerization field and was developed out of a three-year study by a committee representing 75 national organizations.

Still under development are exact sizes of additional van, cargo, and pallet containers, which when completed will provide a family of standards that will permit complete interchangeability of van containers and expedite handling, transfer, and re-shipment of freight.

Coincident with adoption of the ASA standard for van-size containers, the Federal Maritime Board decreed that merchant ships built with government subsidies or financed by government-insured mortgages must be designed to accommodate the standard container sizes approved by the ASA.

Maritime Board Chairman Thomas E. Stakem said the fixing of standard sizes will greatly enhance the growth of containerization by "removing uncertainty as to future size trends and

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## Small Shippers Mobilize To Fight Mounting Costs

New York—Shippers are stepping up their attacks on the mounting costs of small shipments.

Leading the offensive is the Eastern Industrial Traffic League, which has begun a campaign to recruit a "task force" committee of shipping groups across the country to tackle the problem.

The organizing effort got into high gear last week when the

(Turn to page 4, column 3)

## Murky Price Outlook In Copper and Brass Jolts End Product Tags

New York—Spiraling prices for copper and brass are making life difficult for fabricators of industrial nonferrous metals products, who are hard put to determine how high raw material costs will go and how much of the hikes they can pass along to their customers.

Take plumbing supplies, for example. After Feeney Mfg. of Newington, Conn., and Sterling Faucet of Morgantown, W. Va., had kicked off price increases of 6% in tubular plumbing and 9% for all cast brass items and tubular goods containing cast brass components effective May 15, brass & bronze ingot prices went up still another 1¼¢/lb. Complicating the picture was a Bridgeport Brass hike of 5¢/lb. for brass trap tubing last week, which was followed by 4¢/lb. increases by German sources of supply and by Anaconda American and Scovill.

"We're restudying our cast items prices now," commented Richard A. Peterman, general manager of Sterling's Marketing Div. "It's my feeling that prices will have to go up. We don't want to keep changing our prices too often, however, so we're waiting to see what happens to copper first. But we'll have to make our move before June 10."

"Demand hasn't picked up as much as we anticipated," said another plumbing company executive, "and we're trying to keep from increasing our prices further. But if copper goes up more

(Turn to page 46, column 2)



**CUTTING TOOLS TO COSMETICS:** DuPont's new 'Baymal' has wide range of potential applications.

## Du Pont Develops Chemical Boasting 'Uses Unlimited'

Wilmington, Del. — DuPont has developed a new chemical that is said to improve the properties of a dozen products ranging from cutting tools to cosmetics.

The chemical, trademarked "Baymal," is a free-flowing white powder made up chiefly of millions of tiny fibers of aluminum oxide. DuPont now is producing developmental quantities of the chemical, but has not completed plans for building a full-scale plant.

Like many basic chemical compounds, Baymal is designed to work in conjunction with other substances to improve the properties of materials such as paints and textiles.

Major uses anticipated for the chemical include: making materials heat-resistant, creating stain-resistant textiles, enabling water-based paints to cling to any surface, making a stronger foam rubber, improving cosmetic products, and forming extremely hard cutting tools.

Baymal owes its wide range of potential applications to unique properties, including:

(Turn to page 46, column 4)

## New Process Slashes Synthetic Rubber Cost

Beaumont, Texas—Goodyear Tire & Rubber Co. has developed a new process that will enable it to sell polyisoprene "natural" synthetic rubber for less than 25¢/lb.

Polyisoprene can be substituted for natural rubber, which currently is selling for 32¼¢/lb.

Goodyear's \$20-million plant, now under construction, is the first to use the Goodyear-Scientific Design isoprene process. The new design, which cuts capital costs considerably, derives isoprene from propylene, a ma-

(Turn to page 3, column 1)

## Distributors Specializing To Meet Buyer Demands

New York—Industrial buyers are calling the shots in one of the biggest reorganization moves ever to take place in the industrial distribution field: emergence of the specialist.

Where industrial distributors once stocked scores, even hundreds, of items for mill and factory needs, more and more distributors now are concentrating on single, related lines, or "key

lines" of a few manufacturers. Examples are bearings, plastics, electronics, power transmission equipment, portable and power tools, pipe, valves, and fittings.

Result: Experts in the field of industrial distribution estimate that over 50% of the approximately \$4.1-billion yearly volume in finished products and components (not including chemicals and electronics) sold through distributors is handled by "specialists" who have trimmed their stocks to a single or a limited variety of products.

Two trends among buyers have motivated the swing:

• Tighter inventory policies which industrial purchasing agents have indicated will be the accepted practice, born in recession and destined to be continued indefinitely.

• More "stockless purchasing," which means buyers are demanding dependable "overnight" sources close at hand.

Industrial Distribution, McGraw-Hill's publication in the field, takes special note of the specialization trend this week in its 50th anniversary issue. As part of its broad appraisal of pricing, selling, and organizational trends among distributors, ID says: "Specialization to a greater extent will be required of most firms in future years."

"Only the largest supply firms

(Turn to page 46, column 1)

## Materials Handling Show Sparks Buyer Interest, But Price Comes First

Philadelphia—Materials handling buyers and engineers appeared to be in a buying mood as they crowded around the displays at the Materials Handling Institute Eastern States Show held here last week. More than 150 big name exhibitors were pushing hard for a share of materials handling dollars.

Buyers generally seemed to be sizing up the displays as much with an eye to cutting production costs as for initial purchase price. Said the buyer for a big eastern brewery: "We're trying to keep our equipment as simple as possible. We bought a minimum size system—just enough to operate. Not necessarily the cheapest or most efficient, but it did the job. Then we added more and still are."

Mobile handling equipment buyers also are looking to cut costs by using equipment that can do a variety of jobs, including nonhandling. For example, several P.A.'s were interested in fork trucks that would remove snow and leaves outside the plant. One expressed a liking for a vacuum cleaner attachment for

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This Week's

## Purchasing Perspective

MAY 15-21

Business analysts charting the pull-out from last winter's recession lows already are talking about the possibility of an "inventory turnaround." It's true; many purchasing agents admit they are starting to rebuild inventory levels from recession lows. But as of now there is no real indication buyers have thrown overboard all the good intentions they avowed just a few months ago when they said future inventory buildups would be in tune with current production needs.

Caution still prevails even in the surge or new orders reported in purchasing agent surveys and government estimates of manufacturers' stocks of production and finished good stocks that provide firm confirmation the economy has pulled out of the recession and is climbing again.

Prices are another area where all ranks of industrial buyers have formed a main line of resistance. Price indicators show many signs of firming (see Price Perspective, p. 2); but buyers still have room to maneuver because unused productive capacity remains high in virtually every product line.

(Turn to page 45, column 4)

## P/W PANORAMA

• **P.A.'s Often Are By-Passed** when top management makes decisions on capital spending. But ASARCO purchasing men are in on tough capital buying jobs right from the start. For a rundown on ASARCO's setup, see pages 20 and 21.

• **What's Going on in Research and Development?** The R&D column on page 28 takes a look at some of the latest projects that appear about ready to emerge from the laboratory, as well as work that is still in the experimental stages.

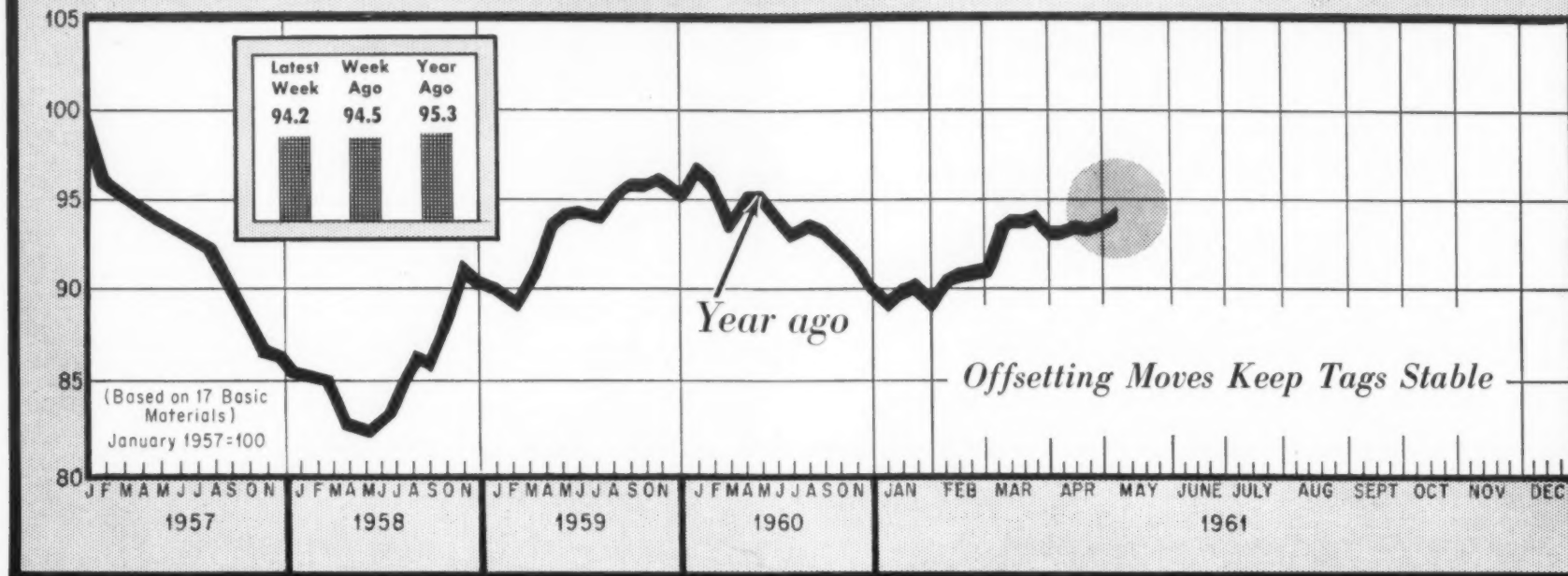
• **Late-Model Used Machinery Is Still Scarce** on the resale market, and the dearth, combined with stronger demand, is making for higher prices. For the current going rates on used equipment and a list of coming sales, see page 42.

• **The NAPA Has Chosen the Man** who will head the professional development program. He is M. G. Edwards, a member of the National Committee for Professional Development and long active in association affairs. For the story, see page 6.



# Purchasing Week Industrial Materials Price Barometer

This index, based on 17 basic materials, was especially designed by the McGraw-Hill Department of Economics.



## This Week's Commodity Prices

### METALS

	May 10	May 3	Year Ago	% Yrly Change
Pig iron, Bessemer Pitts., gross ton	67.00	67.00	67.00	0
Pig iron, basic, valley, gross ton	66.00	66.00	66.00	0
Steel, billets, Pitts., net ton	80.00	80.00	80.00	0
Steel, structural shapes, Pitts., cwt.	5.50	5.50	5.50	0
Steel, structural shapes, Los Angeles, cwt.	6.20	6.20	6.20	0
Steel, bars, del., Phila., cwt.	5.98	5.98	5.975	+ .1
Steel, bars, Pitts., cwt.	5.675	5.675	5.675	0
Steel, plates, Chicago, cwt.	5.30	5.30	5.30	0
Aluminum, pig, lb.	.26	.26	.26	0
Secondary aluminum, #380 lb.	.219	.217	.25	+ 6.8
Copper, electrolytic, wire bars, refinery, lb.	.296	.289	.326	- 9.2
Brass, yellow, (sheet) lb.	.488	.481	.506	- 2.6
Lead, common, N.Y., lb.	.11	.11	.12	- 8.3
Nickel, electrolytic, producers, lb.	.74	.74	.74	0
Tin, Straits, N.Y., lb.	1.097	1.078	.993	+10.5
Zinc, Prime West, East St. Louis, lb.	.115	.115	.13	-11.5

### FUELS†

Fuel oil #6 or Bunker C, Gulf, bbl.	2.20	2.20	2.10	+ 4.8
Fuel oil #6 or Bunker C, N.Y., barge, bbl.	2.62	2.62	2.47	+ 6.1
Heavy fuel, PS 400, Los Angeles, rack, bbl.	2.10	2.10	2.15	- 2.3
Lp-Gas, Propane, Okla., tank cars, gal. (incl. discount).	.035	.035	.035	0
Gasoline, 92 oct. reg., Chicago, tank car, gal.	.115	.115	.111	+ 3.6
Gasoline, 84 oct. reg., Los Angeles, rack, gal.	.103	.103	.112	- 8.0
Kerosene, Gulf, Cargoes, gal.	.093	.096	.09	+ 3.3
Heating oil #2, Chicago, bulk, gal.	.09	.093	.085	+ 5.9

### CHEMICALS

Ammonia, anhydros, refrigeration, tanks, ton	94.50	94.50	90.50	+ 4.4
Benzene, petroleum, tanks, Houston, gal.	.34	.34	.34	0
Caustic soda, 76% solid, drums, carlots, cwt.	4.80	4.80	4.80	0
Coconut oil, inedible, crude, tanks, N.Y. lb.	.13	.13	.163	-20.2
Glycerine, synthetic, tanks, lb.	.25	.273	.293	-14.7
Linseed oil, raw, in drums, carlots, lb.	.167	.167	.168	- .6
Phthalic anhydride, tanks, lb.	.195	.195	.165	+18.2
Polyethylene resin, high pressure molding, carlots, lb.	.275	.275	.325	-15.4
Polystyrene, crystal, carlots, lb.	.18	.18	.215	-16.3
Rosin, W.G. grade, carlots, fob N.Y. cwt.	15.00	15.00	14.00	+ 7.1
Shellac, T.N., N.Y. lb.	.31	.31	.31	0
Soda ash, 58%, light, carlots, cwt.	1.55	1.55	1.55	0
Sulfur, crude, bulk, long ton	23.50	23.50	23.50	0
Sulfuric acid, 66% commercial, tanks, ton	22.35	22.35	22.35	0
Tallow, inedible, fancy, tank cars, N.Y. lb.	.08	.08	.06	+33.3
Titanium dioxide, anatase, reg. carlots, lb.	.255	.255	.255	0

### PAPER

Book paper, A grade, Eng finish, Untrimmed, carlots, cwt.	17.75	17.75	17.75	0
Bond paper, #1 sulfite, water marked, 20-lb, 16-carton lots, cwt.	25.20	25.20	25.20	0
Chipboard, del. N.Y., carlots, ton	100.00	100.00	100.00	0
Wrapping paper, std. Kraft, basis wt. 50 lb rolls	9.50	9.50	9.50	0
Gummed sealing tape, #2, 60 lb basis, 600 ft. bundle	6.60	6.60	6.30	+ 4.8

### BUILDING MATERIALS†

Cement, Portland, bulk carlots, fob New Orleans, bbl.	3.65	3.65	3.65	0
Cement, Portland, bulk carlots, fob N.Y., bbl.	4.20	4.20	4.18	+ .5
Southern pine, 2x4, s4s, trucklots, fob N.Y., mftbm.	115.00	115.00	124.00	- 7.3
Douglas fir, 2x4, s4s, carlots, fob Chicago, mftbm.	126.00	126.00	139.00	- 9.4
Spruce, 2x4, s4s, carlots, fob Toronto, mftbm.	85.00	85.00	88.00	- 3.4
Fir plywood, 1/4" AD, 4x8, dealer, cld, fob mill, msf.	68.00	72.00	64.00	+ 6.3

### TEXTILES

Burlap, 10 oz. 40", N.Y., yd.	.140	.140	.132	+ 6.1
Cotton middling, 1", N.Y., lb.	.34	.339	.342	- .6
Printcloth, 39", 80x80, N.Y., spot, yd.	.174	.175	.208	-16.3
Rayon twill, 40 1/2", 92x62, N.Y., yd.	.20	.20	.235	-14.9
Cotton drill, 1.85, 59", 68x40, N.Y., yd.	.33	.335	.40	-17.5
Wool tops, N.Y., lb.	1.57	1.63	1.445	+ 8.7

### HIDES AND RUBBER

Hides, cow, light native, packers, Chicago, lb.	.202	.202	.200	+ 1.0
Rubber, #1 std ribbed smoked sheets, N.Y., lb.	.316	.325	.425	-25.6

† Source: Oilgram Price Service † Source: Engineering News-Record

## This Week's

# Price Perspective

MAY 15-21

**COMMODITY OUTLOOK**—Prices are slowly firming as a result of the pickup in production and inventory buying.

Most noticeable rises continue to be centered in metals, but textiles, petroleum and chemicals are all beginning to show modest improvement.

• **In metal**—Copper still holds the spotlight. Products made from the red metal are all rising in line with the recent 1¢/lb. boost in the basic copper quote (see story p. 1).

• **In petroleum**—Gasoline prices are strengthening, thanks to lower inventories and the start of the late spring driving season. One top oil official sees over-all demand for petroleum products in the second half running some 2%-3% above 1960 levels.

• **In textiles**—The whole industry, according to one industry spokesman, seems to be "creeping out" of the doldrums. Wool is particularly firm, with the price of wool tops (N. Y.) running some 9% above a year ago.

• **In chemicals**—All copper, tin, and cadmium based chemicals have been rising in line with higher metal tags. Over-all, inorganic chemicals are running 1 1/2% above a year ago.

Business economists are pleased with this new trend on two counts. First, the firming tendency is taken as pretty positive proof of a general pickup, for these tags are excellent business indicators.

Second, the fact that rises are basically slow and gradual (tags went up twice as fast at the beginning of the 1958 recovery—see chart above) lends support to the feeling that inflation is no longer a burning economic problem.

• • •  
**CHEAP MONEY**—Borrowing costs will remain low through summer—despite the rising business curve.

One of the reasons: The nation's money managers no longer are vitally concerned about balance of payment deficits. Over the last few months, for example, the narrowing of the interest rate gap (U. S. vs. foreign) has virtually halted the outflow of gold from this country. The experts now are convinced that current low rates can be held without sparking another capital flight.

Another factor in keeping rates low is the absence of inflation. With industrial prices showing restraint, there's little need to clamp down on the monetary brakes such as the Fed was forced to do in '58.

Some experts think that long-term rates may ease even more. They note, for example, that the interest rate trend in 20-year government bonds has been down recently (from 3.85% to 3.7%). They believe this reflects renewed pressure from the Administration for a lower rate structure.

• • •  
**MINIMUM WAGE IMPACT**—Passage of the new minimum wage law won't have too much of an effect on industrial prices.

Only a handful of firms pay less than the new wage floor. They're mainly concentrated in low-paying industries like textiles, canning, fertilizer, and lumber—and mostly in the South.

Moreover, even in these areas the rises will be gradual. A 15¢/hr rise is scheduled in September and another 10¢/hr. boost for 1963.

The impact on retailers, however, will be much heavier. For example, some 576,000 (or 87%) of newly covered workers now earning under \$1/hr. are in the retail area. Equally worrisome is the provision that calls for time-and-a-half pay for retail employees starting in '63.

According to the Senate Labor Committee all this could mean some pretty hefty boosts. Thus, direct wage costs of food stores are expected to go up 7%, department stores some 17%.

Despite the retail impact, the total effect on the entire economy will be relatively small. One government observer estimates the new wage minimum will add only 1% to the nation's over-all income total.

# Overproduction, Slow Demand Force Plywood Firms to Back Off on Prices

Seattle—The price of plywood dropped to \$68/1,000 sq. ft. in the bellwether sanded, 1/4" AD grade. Some mills were reported to be selling straight carloads for as low as \$64.

The industry blamed the slow pickup in consumer demand for its failure to hold the \$72 price of the past four weeks. But insiders single out recent output increases by Northwest plywood mills as the real culprit.

"Demand has picked up," commented one lumber expert. "That's what raised the price originally from \$60 to \$72 a thousand, and the mills were warned about overproducing two months ago when the lumber dealers began laying in inventory to prepare for a building upturn."

In early March—when prices began to climb, plywood production was running at 70% of capacity. By the first week of

April it had risen to 82%, and before the end of the month it rose to 89% before tailing off to the current rate of around 85%.

The surge in plywood output outpaced the rise in consumer demand. According to the Douglas Fir Plywood Assn., consumer demand amounted to 72% of plywood production capacity in March and 83% in April. The association expects consumer demand through May and June to average 84% of capacity.

## THIS WEEK'S SCRAP PRICES

	May 10	May 3	Year Ago	% Yrly Change
Steel, #1 hv, dlvd Pitt, ton.....	33.00	35.00	34.00	- 2.9
Steel, #1 hv, dlvd Cleve, ton.....	32.50	32.50	33.00	- 1.5
Steel, #1 hv, dlvd Chic, ton.....	34.00	36.00	31.00	+ 9.7
Copper, #1 wire, dlr buy, fob NY, lb.....	.24	.24	.24	0
Copper (hv) & wire mix, dlr buy, fob NY, lb.....	.225	.225	.21	+ 7.1
Brass, light, dlr buy, fob NY, lb.....	.125	.125	.105	+19.0
Brass, hv yellow mix, dlr buy, fob NY, lb.....	.125	.125	.115	+ 8.7
Alum (cast), mixed, dlr buy, fob NY, lb.....	.10	.10	.11	- 9.1
Alum (sheet), old clean, dlr buy, fob NY, lb.....	.095	.095	.11	-13.6
Zinc, old, dlr buy, fob NY, lb.....	.035	.035	.04	-12.5
Lead, soft or hard, dlr buy, fob NY, lb.....	.07	.07	.083	-15.7
Rubber, mix auto tires, dlvd Akron, ton.....	11.00	11.00	12.50	-12.0
Rubber, synth butyl tubes, East, dlvd ton.....	.063	.063	.083	-24.1
Paper, old corrug bax, dlr, Chic, ton.....	16.00	16.00	16.00	0
Paper, #1 mixed, dlr, NY, ton.....	1.00	1.00	5.00	-80.0
Polyethylene, clear, dlr, NY, lb.....	.07	.07	.11	-36.4

## Price Fixing Charged

Los Angeles—A federal grand jury indicted two local manufacturers of aircraft components—Avdel, Inc., and D. W. Price Corp.—on charges of price fixing and conspiring to eliminate competition.

In addition, the jury charged the two firms with attempting to "divest an American company of control over U.S. patent rights relating to items important to our national defense and to vest them in a foreign corporation."

Both companies make quick release pins, which are used in ejector seats for high-speed airplanes.

## Price Briefs

• **Tin Salts**—With tin tags climbing to new highs, prices of tin salts went up .8¢/lb. for potassium stannate and 1¢/lb. for sodium stannate and anhydrous crystals.

• **Copper derivatives** — The recent increase in red metal prices is filtering through to a number of copper chemicals. Latest markups include: 1¢/lb. for black copper oxide, 35¢/cwt. for monohydrated copper sulfate, 55¢/cwt. for copper carbonate, and from .5¢ to .7¢/lb. for cupric and cuprous chlorides.

• **Triacetin** — Previous price cuts in glycerin caused Eastman Chemicals to lower its triacetin tags by 1¢/lb.

• **1, 2, 6-Hexanetriol** — A 29½¢/lb. slash by Union Carbide for its 1, 2, 6-Hexanetriol signalled the emergence of this gelatin plasticizer and alkyd resins intermediate from its developmental stage into commercial production.

(For further late price changes see page 46)

## New Isoprene Process Developed by Goodyear

(Continued from page 1)  
terial available in billion-pound lots as a refinery byproduct.

Every major rubber supplier now has a "natural" synthetic plant under construction or on the drawing boards. Although synthetics have been taking jobs away from plantation rubbers for years, insufficient heat resistance kept them out of some markets until the appearance of polyisoprenes and polybutadienes.

Synthetics are pressing plantation rubbers in two important areas: price and quality. Plantation price tags vary all over the lot depending on world demand, crop situations and a host of other factors. Prices of synthetics, on the other hand, remain fairly stable and have usually been set under prevailing plantation levels. Since synthetics are made in a plant by a controlled chemical process, their quality is usually much more uniform than that of plantation rubber.



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# Washington Perspective

MAY 15-21

President Kennedy claims that "manipulation of inventories has become a frequent method of avoiding taxes," and orders have already gone out from Internal Revenue Service headquarters for field agents to take a closer look at inventory figures claimed in millions of tax returns filed by businesses.

Behind the move is the belief of tax officials that many businesses are lowering their tax bill by the way they show their inventories on the books at the end of a tax year. A lower year-end figure cuts taxes due the government by raising the figure for cost of goods sold during the year. And anything that raises the cost figure helps to lower taxable income.

Here's an example Treasury Secy. Dillon gave the House Ways & Means Committee:

If a taxpayer has a beginning inventory of \$40,000, purchases during the year of \$200,000 and an ending inventory of \$60,000, his cost of goods sold is \$180,000 (\$240,000 minus \$60,000). But if the taxpayer reports his year-end inventory was only \$50,000, the cost of goods sold becomes \$190,000, "resulting in an understatement of taxable income of \$10,000." At the current 52% tax rate, this cuts the firm's tax bill by about \$5,000.

One way in which income is understated this way is through use of the present provision of law permitting inventories to be valued at cost price or market price, whichever is lower. Dillon says "The use of very low market values" cuts taxable income, and also that the same end can be accomplished by an "improper count" of all inventory items.

While officials don't say so flatly, the implication is that in estimating inventories, many taxpayers are giving themselves the advantage. Other businesses are just plain juggling or falsifying their inventory figures.

Internal Revenue officials say privately the problem is enormous, particularly since inventories and inventory policy have become so important in operating a business profitably. As they put it, "Small errors in inventory figures can make a large difference in profit."

The Kennedy Administration is virtually committed to increased spending for both defense and space in fiscal 1962. Officially, the most the Administration will say is that it is considering such a boost for the year that begins July 1. Actually, most of the decisions already have been made and will be embodied in a supplemental appropriation request to be sent to Congress soon.

The Administration already has tacked an extra \$1-billion on the original Eisenhower defense budget for fiscal 1962. But military planners—particularly those in the Army and Marine Corps—are dissatisfied with increases for procurement of conventional arms and equipment. They want more, and probably will get it, for purchase of armored vehicles, small arms, light aircraft, tactical missiles, advanced electronic gear for battlefield use, and other limited-war weapons.

Congressional support for such a move would not be lacking. Cold-war pressures are minimizing possible opposition among economy-minded Democrats and Republicans. The best examples of this are recent moves by the Senate and House Armed Services Committees to increase spending for long-range strategic bombers above the requests of both Kennedy and Eisenhower.

Similar Congressional support is likely for Kennedy's plan to boost space spending by as much as \$600-million. Most of the extra funds would go into the three-man space project (Apollo) and rockets needed to land a manned expedition on the moon (Rover).

## Weekly Production Records

	Latest Week	Week Ago	Year Ago
Steel ingot, thous tons	1,943	1,858*	2,137
Autos, units	133,646	121,781*	150,894
Trucks, units	25,669	26,215*	30,732
Crude runs, thous bbl, daily aver	7,878	7,738	7,788
Distillate fuel oil, thous bbl	11,340	11,275	11,636
Residual fuel oil, thous bbl	5,788	5,930	5,697
Gasoline, thous bbl	27,470	27,483	26,924
Petroleum refineries operating rate, %	79.4	78.0	79.7
Container board, tons	163,799	157,645	155,022
Boxboard, tons	103,998	100,383	96,885
Paper operating rate, %	87.9	91.5*	99.4
Lumber, thous of board ft	237,832	233,426	253,474
Bituminous coal, daily over thous tons	1,235	1,245*	1,395
Electric power, million kilowatt hours	14,206	14,254	13,139
Eng const awards, mil \$ Eng News-Rec	559.6	418.9	382.8

\* Revised

## U.S. Trade Fair Exhibits Lure Foreign Buyers

New York—The U.S. World Trade Fair, which has traditionally given foreign manufacturers a place to sell the U.S. market, was turned into a "two-way" trading street this year when 38 American firms joined the fair to show their wares to the foreign visitors.

The fair, which opened an 11-day run here May 3, featured products from 65 countries.

The U.S. exhibits were organized under the auspices of the Dept. of Commerce and were aimed at the overseas buyers who

have historically toured the show and the large number of foreign exhibitors who usually take time out from manning their own booths to visit other exhibits.

Most foreign exhibitors had little patience with U.S. "protectionist" sentiments. "Let's not kid ourselves any longer," an importer of European hand tools told PURCHASING WEEK, "we're living in one small world and we must trade to survive."

Several exhibitors took this opportunity to remind their U.S. visitors that trading is a "two-

way" street. The Saab booth, for example, used a map of the United States to note that Saab creates jobs in this country by purchasing supplies and raw materials in hundreds of cities in 27 different states.

West Germany reminded fairgoers that each West German bought an average of \$26 of "made in U.S.A." goods last year—against an average American purchase of \$5 of goods made in West Germany.

Germany joined the other common market countries in a single exhibit that allotted space to each country inside the larger area. Japan, which was a major factor at previous shows, had only minor representation this year.

Although most of the foreign exhibitors concentrated on consumer goods, some industrial equipment was on display. Two booths featured machine tools (Belgium showed a lathe, while Sweden featured three drill presses, a nibler and a lathe) and another dozen had precision equipment and tools on hand.

Here's a country-by-country rundown of the industrial products on view:

• **Belgium.** Electrical connectors and switches, analytical scales, lathe, cement mixer, telegraph switching gear, and electric motors.

• **England.** Duplicating equipment and hand tools.

• **Poland.** Analytical scales, microscopes, micrometers, and hand tools.

• **France.** Electrical connectors and intercom systems.

• **Japan.** Hand tools.

• **Israel.** Valves, electric motors, micrometers, microscopes, and cutting tools.

• **Sweden.** Machine tools.

• **Luxembourg.** Material handling equipment.

## Small Shippers Recruit Task Forces To Combat Mounting Freight Costs

(Continued from page 1)

support of the National Industrial Traffic League was obtained. This week a strong pitch is being made to the Western Traffic Conference at its meeting in Portland, Ore.

Carriers are eyeing the "task force" idea with considerable interest, too, reports Clarence D. Smith, director of traffic for American Home Products and one of the authors of the organizing letter now going out to shipper groups.

REA Express, which is seeking to become a dominant factor in the small shipments field, has given the idea its encouragement. REA President William Johnson said in a letter to Smith that he is "encouraged by the obvious indication that you intend to play a vigorous role in the development of public policy in this field." Railroads, motor carriers, and freight forwarders are pressing Smith and his fellow organizers for some inkling of what direction the "task force" would take.

The job of the task force, as outlined by EITL, would be to:

• Negotiate with carriers to obtain better service and lower

rates for small shipment traffic.

• Inventory all methods of transportation capable of serving small-lot shippers, such as individual carriers, coordinated services, containerization, etc.

• Consult with regulatory agencies to provide relief for small-shipment traffic under existing laws and regulations.

• Confer with legislative committees to develop a legislative program designed to help small-lot shippers.

• Create an information program to bring to the attention of the public "shortcomings of present transportation facilities and rates."

Outlines of the committee are already apparent.

The National Industrial Traffic League will be represented by Walter K. Cabot, general traffic manager, Johnson & Johnson.

National Small Shipments Traffic Conference, Inc., in Washington, D.C., has on the committee Robert J. Tyler, general traffic manager, Tube Turns Div., Chemetron, Louisville, Ky.

Ohio State Industrial Traffic League has assigned Harley F. Walton, traffic mgr., Woolson Spice Co., Toledo.

## Proposed LTL Rate Hike Protested

Washington—Shippers have asked the Interstate Commerce Commission to set aside for investigation a proposed increase of 6% on less-than-truckload rates between the southern and central territories due to take effect May 15.

The protesting shippers, including the Southern Traffic League and several textile manufacturing associations, charged that truckers throughout the country apparently are experimenting "to see just how much can be squeezed out of less-truckload traffic before such traffic ceases to flow in interstate commerce via motor common carriers."

They said such increases are forcing more and more shippers to private carriage and cooperative transport schemes.

The 6% increase, which was proposed by the Central and Southern Motor Freight Assn., is coupled with elimination of a temporary surcharge of 50¢ per shipment. The truckers maintain the net increase in revenue they will realize will amount to only 2.4% and that this is justified by increased labor and operating costs.

The board of suspension recently suspended and placed under investigation a similar increase in truck rates between southern and eastern territories. However, the Southern Motor Carriers' rate conference has now appealed to the full ICC to overturn this action.

## Southern Rails Seeking Piggyback Plan Reform

Washington—Southern railroads want to modify piggyback Plan III to allow shippers to consign trailers (a minimum of two per flat car) to different destinations.

The proposal would go into effect May 13 on shipments between points north and south of the Ohio River.

The Central and Southern Motor Freight Tariff Assns. have asked the Interstate Commerce Commission, however, to reject the move. They point out that the legality of Plan III rates generally still has not been decided by the commission. Furthermore, they contend, the rail proposal would defeat minimum loading requirements in piggybacking.

## Trucking Firms Ask ICC To Curb REA Expansion

Washington—The American Trucking Assn. has asked the Interstate Commerce Commission to take a new look at the role of REA Express in the transportation system.

ATA accuses REA of conducting "a planned campaign to obtain unrestricted entry into the motor carrier field and to expand existing (trucking operations) far beyond the scope originally contemplated by ICC."

The trucking group strongly objected to a finding by an ICC regional joint board that REA should be granted extensions of certain trucking routes in New England. It asked ICC to reject the recommendation.

The express company has filed numerous applications in the past year for extensions of truck routes. It justifies these requests as an attempt to extend express service to areas where rail service has been abandoned or sharply restricted.

ATA fears, however, that REA is trying to become a nationwide railway-owned motor carrier competing with for-hire truckers.

The association says it does not object to REA "keeping its express service up to date by utilizing underlying motor carriers to furnish movement of its freight in addition to railroads."





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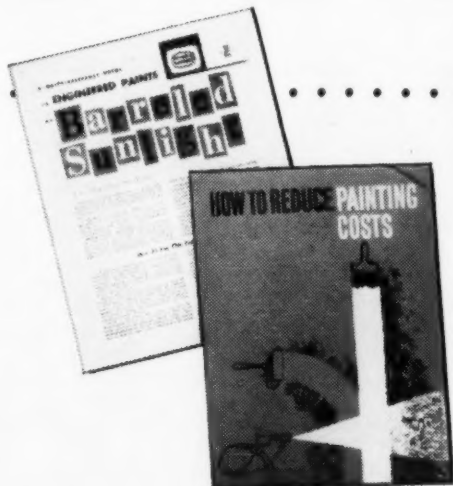
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## Chicago to Get Huge Truck Terminal Complex

Chicago—A 424-acre truck terminal complex, to be called the National Truck Depot, will be built here at a cost of more than \$40-million. Site will be in suburban Bridgeview, about 12 miles southwest of Chicago's downtown Loop.

The terminal, to be completed by late fall of 1962, will provide a convenient place for freight transfer as well as trailer exchange. An automated belt system will operate in a 40-ft. aisle in the center of each of the eight extensions as well as the main

building. Unloaded freight can be delivered in minutes to any of the 2½-miles of buildings.

The terminal is being developed by M. L. Moreland and H. C. Mettam. "Instead of having to fight traffic all over Chicago in order to exchange freight with other lines," Mettam said, "our system will provide a one-stop transfer point for some 300 truck lines." He estimated that the new system would cut 24 hours from the time it takes less-than-truckload freight shipments to pass through Chicago.

Trucking companies will lease space depending on the size of their operation and pay a certain amount per pound of freight handled by the depot. Interchange is designed to handle 50-million lb. of freight per day and up to 85-million lb. on peak days.

Mettam sees the day when all major cities throughout the United States will have similar depots to accelerate the movement of truck cargo, as well as ease truck traffic on already crowded city streets.

## NAPA Names Edwards to Conduct Professional Development Program

New York—The NAPA has hired the man who will guide its professional development program, which is scheduled to go into high gear after next month's convention.

He's Marshall G. Edwards, secretary and purchasing manager of Storkline Corp., Jackson, Miss. Edwards is now a vice chairman of the National Committee for Professional Development, heading the district and local activities group.

NAPA members who don't know Edwards will get their first chance to meet him at the convention, where he will work with Executive Committee members on plans for the professional development program. Edwards will start work at the national office in New York, June 15.

But indications are that he won't spend much time there. High on the list of "musts" during the first year of the program are closer NAPA contact with colleges and liaison with local



M. G. EDWARDS

associations to make members more conscious of the aims of the program.

It's understood that these will be Edwards' chief duties in administering the program, which will be under the direction of executive secretary G. W. Howard Ahl.

Actually, the professional development program will occupy only half of Edwards' time. The balance of his assignment with NAPA will be to assist Ahl in the association's many areas of expanding activity.

Edwards, who served as both national director and president of the Purchasing Agents Assn. of Mississippi, topped off a B.S. in commerce from Drexel Institute of Technology with an M.A. in education and psychology from Mississippi College.

## 'Buy-American' Policies Swing Federal Contract To Third Lowest Bidder

Washington — Buy-American price differentials swung a Bureau of Reclamation contract award to General Electric Co., even though it was third lowest bidder.

The bureau received seven bids on eight 125,000 kva hydro-generators for its Glen Canyon Power Project on the Colorado River in Arizona. The three low bidders were: Fairbanks, Morse & Co., \$7,467,705; ASEA Electric, Inc., \$7,895,000; General Electric Co., \$8,007,798.

However, Fairbanks, Morse and ASEA proposed to manufacture their generators in Europe. GE, on the other hand, said it would do 97% of its manufacturing at Schenectady, and 3% at Waynesboro, Va., making it eligible for the 6%, 'Buy-American' price differential. Since Schenectady is in a labor surplus area, another 6% was added, making GE's bid lowest of the three.

The Bureau received no identical bids on the proposed equipment and pointed out that it never has received identical bids on major items such as generators and turbines.

They all  
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when you  
buy 'em,

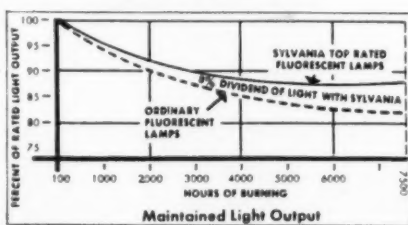
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# Higher Prices Seen for Copper, Brass Scrap

**New York**—Spurred by heavy Japanese buying and by an upsurge in demand for primary products, copper and brass scrap prices have ridden up about 3¢/lb. in little more than two months—which amounts to almost 15% for many important grades.

Several factors point to possible further increases. For one thing, as one Eastern scrap dealer put it, "Japanese prices go up as domestic buyers raise theirs. I don't think the race is over yet."

Add to this the growing scarcity of these scrap materials as demand increases for copper, brass mill and secondary smelter products. Shipments of fabricated copper products, for example, registered a whopping 21% increase in March over February, and brass and bronze ingot shipments climbed 19% in the same month.

This upturn in primary market demand is expected to continue. "Users are starting to increase their inventories in terms of days' supply," observed one brass and bronze ingot smelter.

Aluminum scrap prices have been very stable at the smelter level where demand has remained relatively quiet. Dealer buying prices, however, have firmed up in the last couple months as export demand continues strong. Dealers also report supply running a little short in some spots because of slower scrap generation.

## Other Scrap Areas

Here's the outlook in other scrap areas:

• **Steel scrap:** Despite the gradual pickup in steel production, ferrous scrap prices have been weakening. The reasons: export demand has been tapering off, improved weather has increased collections, and the recent spurt in steel scrap prices started mills to increasing the proportion of pig iron used vis-a-vis scrap.

"Barring an unexpectedly sharp increase in steel production, scrap iron prices are likely to level off at current quotes for the near future," commented one metals expert. "The competitive pressure exerted by pig iron is

likely to offset a gradual increase in domestic demand."

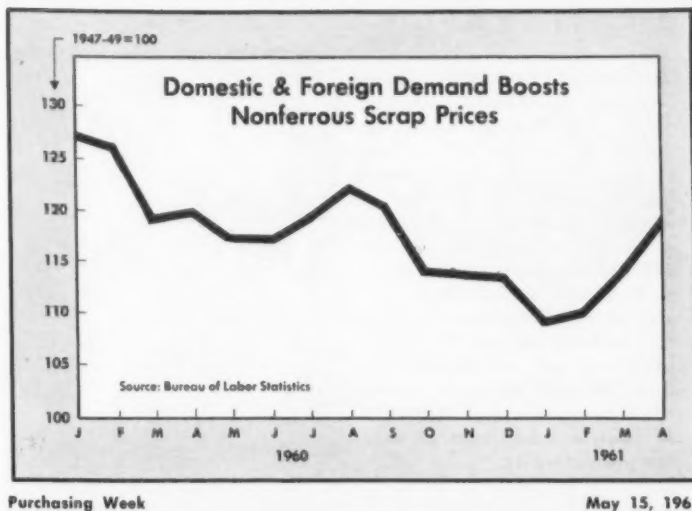
• **Waste paper:** The finer grades of waste paper—such as white envelope cuttings, hard white shavings, etc.—are moving pretty well, but the lower grades—including old corrugated boxes—are reporting low sales.

With the paper industry entering its slow season, dealers are saying that neither buying nor selling prices can be expected to firm before late September at the earliest.

• **Scrap rubber:** Improving de-

mand from the auto industry—particularly tire makers—is firming up prices for scrap rubber. In the past two weeks, synthetic butyl tubes have gone up ½¢/lb., and the other scrap rubber grades are moving well.

• **Plastic scrap:** Not much interest is being displayed for plastic scrap. Prices are weak with dealer quotes described as nominal. With the toy and home products demand season for this scrap material just about ended, buying activity probably won't resume until fall.



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## Court Refuses to Take Up Union Hiring Hall Cases

**Washington**—The U.S. Supreme Court has refused to hear nearly a dozen cases relating to controversial labor union hiring hall and job discrimination practices.

The refusal followed two major decisions by the court in April dealing with similar problems, indicating the court feels that the opinions set down in these rulings cover all present problems relating to hiring halls.

The decisions overturned standards under which union hiring halls have been forced to operate for several years. It ruled that hiring halls are legal so long as they are not used to discriminate against nonunion workers. In its second opinion, the court said even if hiring halls are found to be operating illegally, unions and contractors involved in the illegal operations are not subject to stiff financial penalties under the law.



Buy a carload of distribution material. Mail out your check. Is it paid for? Not by a long shot!

Some people have been shocked when they totalled up what looked like a smart buy, only to discover the warehouse ate up perhaps five times what they saved.

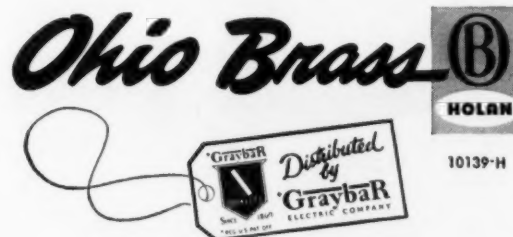
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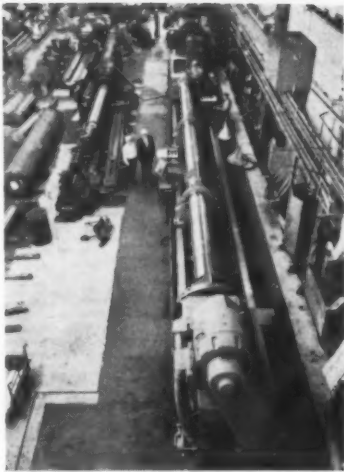
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**ELECTRONIC LATHE:** Turning lathe installed in Chicago machine shop of A. Finkl & Sons is believed to be first of its kind equipped with electronic controls for feeds, speeds and threading. The double-headed lathe can turn a forging up to 65 ft. long and 7 ft. in diameter. Here it turns a 54,000-lb. walker shaft forging, which will be used in a drag line machine for coal mine stripping. It will take about 200 hours to finish the shaft, during which time more than 13,000 lb. of steel will be removed from the rough forging.



## P.A.'s Get Managerial Tips at N.J. Conference

New Brunswick, N. J. —The P. A.'s biggest problem in being an effective manager is to overcome resistance to change within his own company. That's the message two management consultants brought to some 90 members of the Purchasing Agents Assn. of North Jersey here.

Speakers at a day-long Fourth Annual Purchasing Agents Conference sponsored jointly by the association and Rutgers University were Norman Kobert of Bayer, Kobert & Associates, and

Howard Leslie, vice president of Value Analysis, Inc. Although Kobert's morning session concerned planning and Leslie spoke on value analysis, both underlined a single theme—a good idea has to slug its way to recognition, but the fight is worthwhile.

Kobert listed these guides to proper planning:

• **Define Objectives.** P. A.'s cannot work from day to day, but must have an over-all goal.

• **Evaluate and Follow Up.** After establishing a plan, a project dies rapidly unless you set

deadlines and compare results against the objectives.

• **Collect Timely and Accurate Information.** Results can only be as effective as the data that go into the decision, which means that subordinates must understand what they are doing and why.

• **Keep Plans Simple.** Best way for getting total participation from your department is to develop plans that everyone can understand. "If you're going to dangle a carrot in front of your people, make sure its close enough to hold their interest," Kobert advised.

• **Permit Management by Exception.** Biggest roadblock to flexible planning is following the set patterns blindly. The consultant said that P. A.'s should get rid of their "defensive file"—i. e., the filing cabinet full of records that someone "might ask to see, but never does."

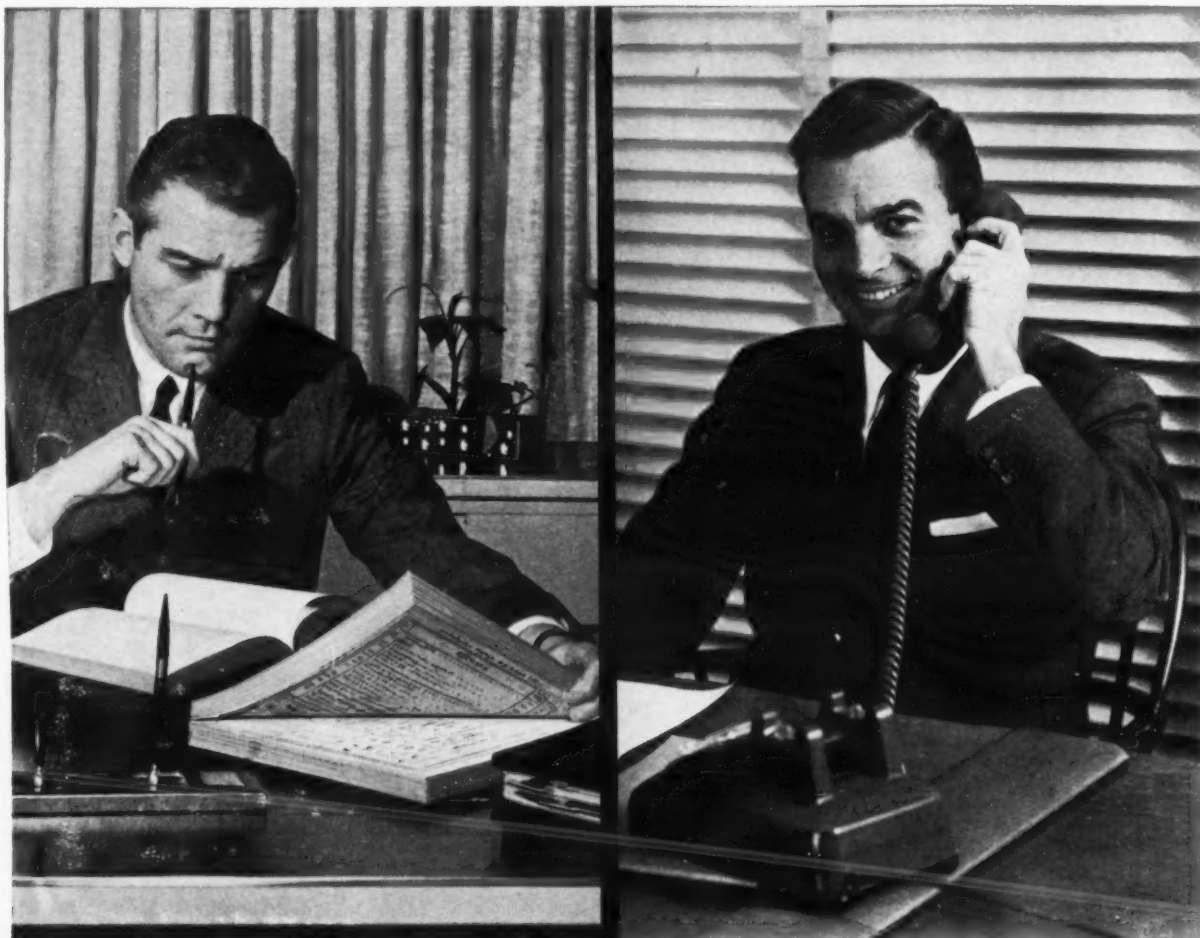
Kobert concluded, "Most problems you will find are people, not technicalities. You have to motivate those around you to accept change."

Leslie opened the afternoon session on value analysis by defining value as the lowest price to accomplish a function or service reliably. Then he launched into a description of the toughest handicap in eliminating unnecessary costs—habits and attitudes.

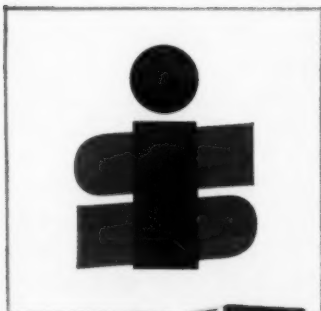
Referring to an "attitude screen with negative spots in it," Leslie cited the case of an engineer who was designing a fabricated motor base that cost slightly over \$100. The engineer used it because several years previously he designed a product with die casting, and the die casting failed. Because of his negative approach, it didn't occur to him that through new advances in die casting, the company could get the same function for \$3.50.

"In my experience, 60% of companies that now have a value analysis program got it through the efforts of the purchasing department," he noted. "It's up to purchasing to keep informed on VA, get this information back to management, and motivate the company out of its complacency."

"Remember," Leslie said, "that losing value means losing the market."



## Two ways to keep from being outclassed!



Grand Rapids  
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■ It's a problem. Many companies each year are "outclassed" by their freight classifications — and waste thousands of dollars in shipping costs. In many cases, their own descriptions are at fault. If you have the uncomfortable feeling that this is happening to *your* company, you can do one of two things. Become an expert on classification yourself by drudging study of the "National Motor Freight Classification" manual. That's the hard way, as you well know.

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## INTERSTATE SYSTEM

MORE THAN A TRUCK LINE . . . A TRANSPORTATION SYSTEM

## Texas Importers Fight 'Buy-American' Curbs

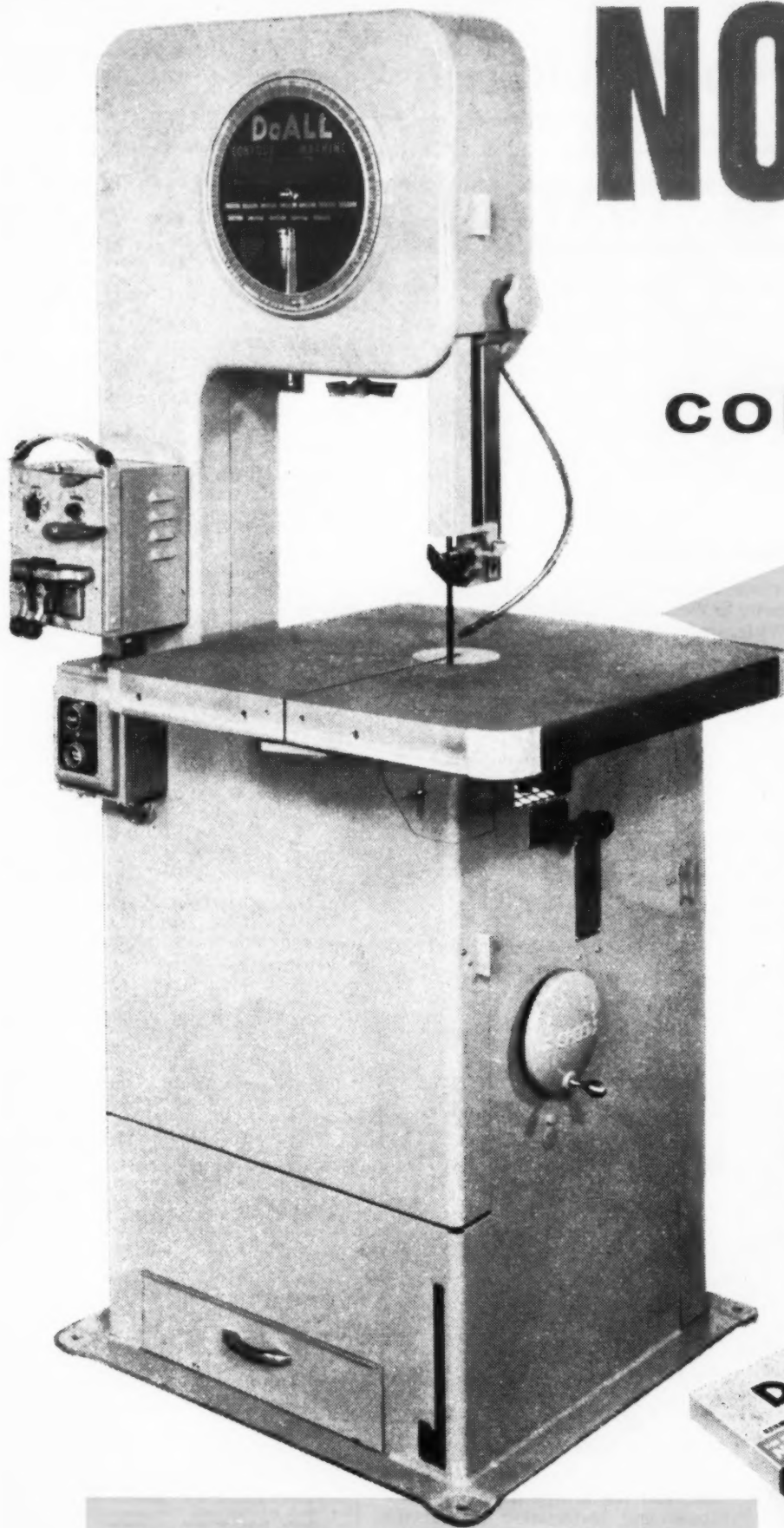
Austin, Tex. —A group of steel importers asked a District Court here to void the Texas Highway Commission's order that builders give preference to American materials in highway construction.

Claiming that the commission does not have legislative authority to issue such a directive, the Texas Assn. of Steel Importers brought suit for a permanent injunction to restrain the commission from specifying domestic materials. The court took the injunction plea under advisement and set May 22 as the final date for filing briefs and replies.

In defense of the commission, Asst. Atty. Gen. H. Grady Chandler said, "Importers have no vested rights to sell steel to the state."

In reply, the importers claimed the commission exceeded its legal authority.





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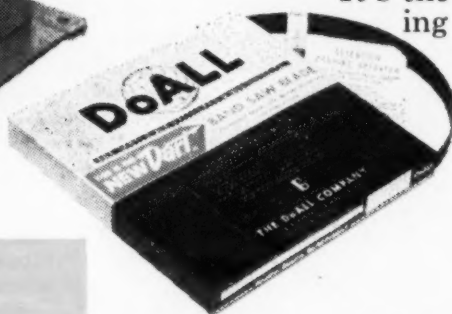
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## P/W MANAGEMENT MEMOS

A collection of timely tips, quotations, and inside slants on management and industrial developments, along with a run-down of events and trends of use to the purchasing agent.

### Crime and Punishment

The professional criminal is a piker compared with the nonprofessional, according to Arthur J. Clement, a bond manager with the Maryland Casualty Co. The white collar crook, for instance, makes off with about \$1-billion a year, he points out, and this is about twice the annual take of the skilled craftsmen who specialize in such pursuits as robbery, burglary, confidence games, pickpocketing, and the like.

Says Clement: "Experience has demonstrated that even the most trusted and long serving employees may resort to business thievery if they are faced with that tragic pair of circumstances—a pressing financial need and a tempting opportunity to get away with it, at least for a while."

Clement cited gambling as the greatest single motive for white collar crime. Other causes: emergency financial needs, such as big medical bills, living beyond one's income, dissatisfaction with one's position in the company and the rate of pay, and women—not necessarily in that order.

The trouble is that a great deal of amateur crime, particularly embezzlement, goes unpunished and in some cases, is never even reported because "the boss is too chagrined to admit that he did not protect himself adequately," Clement says.

There's no sure-fire protection against the dishonest employee, Clement admits, but outside audits, internal con-

trols, and double checking of transactions can help discourage all but the most ingenious. To trip up the embezzlers who prefer to plunder the firm a little bit at a time over a long period of years, Clement suggests the following technique: Have a substitute take over positions of trust during the vacation period. Fill-ins often stumble on suspicious items that indicate a vacationer might be playing tricks with the firm's records.

### Life on the New Frontier

New Frontiersmen have invented a new game that's enjoying a wide popularity in Washington political circles, according to W. Willard Wirtz, under secretary of labor. The idea is to get one up on your colleagues in the scramble for promotion in government office, but some of the stratagems can be applied with equal profit in industry. Here are some of the rules of the game:

- Be the first one in the office and the last to leave. Be sure to leave the lights on when you go home.
- Phone people you want to impress before they get to work or after they've left the office for the day. Leave a message that you called.
- To guard against the foregoing dodge by another player, instruct your secretary to say that you've just left for a conference at the White House.

## PURCHASING PARADE

Personal glimpses of P.A.'s as they march by in the news



Here's evidence again how broad an area of endeavor the P. A. profession covers:

• **Sister Marie Celeste** (above) of Erie, Pa., is one of the many sisters in the hospital purchasing field throughout the Catholic Dioceses of the U. S. and Canada.

Before being named **Purchasing Agent** at **St. Vincent Hospital** in Erie, she was Director of Admissions; before that taught high school business subjects.

• Another purchaser with a church background is **David A. Bailey, P. A.** at **Solar Electric Division of El-Tronics, Inc.** (Warren, Pa.), who devotes about 30 to 40 hours a week to pastoral duties at the First Church of God in Forest County, Pa.

Bailey recently became a member of the Northwestern Pennsylvania Assn. of P. A.'s. He's now using whatever spare time he has by taking additional college studies at Clarion State College, about 40 miles from home.

A testimonial dinner for **C. Colgate Fish** (second from right, above), **Gen-**



**eral Purchasing Agent, New England Gas and Electric System** was attended recently by over 240 friends in Cambridge, Mass., on his retirement.

Shown from left: **John H. Logue**, who succeeds Fish as purchasing department head for the utility; Mrs. Fish; **C. C. Fish** and **Hall M. Henry**, president of **NEGEA Service Corp.**

Fish, a veteran of 45 years' service, was gifted with a set of golf clubs and a savings bond by his employee-friends.

Other P. A.'s in the limelight:

• **Judson Brown, Manager of Production Control and Purchasing at Dynex, Inc.** (Milwaukee), has been elected president of the American Institute of Industrial Engineers.

• **Charles B. Kipps, Procurement Officer at the National Bureau of Standards** (Washington, D.C.) has been awarded the U. S. Department of Commerce Silver Medal for Meritorious Service.

He was cited for "conscientious service and broad knowledge of regulations and procedures in the procurement of supplies and equipment; for extremely efficient performance of

official duties over a long period of time; and for a high degree of helpfulness and cooperation beyond the normal call of duty."

Kipps joined the Bureau at the age of 16, was appointed Procurement Officer in 1947, is a member of the Federal Purchasing Assn., and is the author of several procurement manuals.

**Sailor's Treat:** P. A.-sailor **Arthur C. Thompson** celebrated his promotion to **General Purchasing Agent of Maumee Chemical Co.** (Toledo) by buying himself a new Dragon Class sailboat.

Although this is Thompson's first boat of his own, he's crewed many races for other skippers. He expects to do his share of racing this summer on Lake Erie, sailing out of the Toledo Yacht Club.

Thompson also is a glider enthusiast (he's a jet pilot in the naval reserve and served in both W.W. II and the Korean War). He got his gliding experience in Texas and Elmira, N. Y.—his home town—and now plans to do his gliding locally out of Adrian, Mich.

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## How do you combat back door selling?

**W. F. Gerety, director of purchases Kaman Aircraft Corp., Bloomfield, Conn.:**

"This is a chronic problem and we make every effort to control it. Our receptionists have been instructed to refer all visitors who come to solicit business to the purchasing department. Purchasing coordinates with other departments, if it is felt necessary that the visitor discuss his products with the potential using department. This does not prevent visitors with appointments about specific problems from seeing the right people. We also make every effort to inform the requisitioner and the salesman involved, if our attempts to control through the receptionist are circumvented, that this procedure is frowned upon."



**J. B. Mills, plant buyer, Jones & Laughlin Steel Warehouse Div., Jones & Laughlin Steel Corp., Indianapolis:**

"This problem can not be remedied by the issuance of edicts and directives. The only true remedy is for the individual buyers to acquire knowledge of specific processes and/or problems and to develop the skill and techniques required to improve or solve them."

**G. H. Cole, manager of purchases, Alabama Power Co., Birmingham:**

"We attempt reasonably to regulate and control rather than prevent it. We practice among our departments with key responsibility in purchase requirements a continuous education program pointing out advantages of coordinated purchasing. We do not restrict supplier representatives' contact with other departments but do restrict placement of orders, other than delegated purchases, to purchasing. We emphasize the desirability of reasonably limiting in other departments the man hours devoted to purchase transactions."



**Michael Musto, purchasing agent, Dahlberg Co. (hearing aids, etc.) Minneapolis:**

"Back door selling has not been a problem here. The very few times it occurred, we contacted the individual involved, as well as the salesman. We find future incidents can be avoided if an explanation is given to the salesman of why we insist he clear through purchasing. When a department requests information or services of a salesman, we encourage having our department handle this request. As long as we can offer service, as well as quick results, back door selling will be avoided."

**J. M. Burgner, materials manager, Power Auxiliaries Div., De Laval Steam Turbine Co., Trenton, N. J.:**

"We enforce a strict policy. Our receptionist refers all salesmen to purchasing where buyers are responsible for initial screening interviews. Information on those products or services that justify more intensive investigation is discussed with designated supervisory personnel in the manufacturing and engineering divisions. When it is mutually agreed that direct contact is necessary and desirable, the salesman is subsequently cleared. Courteous reception of all salesmen by our buyers also has eliminated salesmen's desire to see engineers or shop personnel."



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**NAPA DIST. 8:** Activities for district 8 conferences are being mapped out by a task force headed by R. J. Atkins, P.A., Resistoflex Corp., Roseland, N. J. The Oct. 25-27 session, Essex House Hotel, Newark, N. J., centers around the theme of "New Frontiers for Purchasing." "It will present P.A.'s not only with up-to-date information on new products, but also on new materials, methods, and services," says Atkins. George Steinfeld, P.A., Abarry Steel Co., Perth Amboy, N. J. is "Inforama" chairman. At a recent North Jersey P.A. Assn. meeting Steinfeld (l) and Atkins (ctr.) check in at Dist. 8 conference information table.

## This Changing Purchasing Profession . . .

**Milton E. LeFevre** has been assigned the new post of manager of purchases-packaging, **Dow Chemical Co.**, Midland. Formerly director of purchases, Midland Div., he will manage and direct the procurement of packaging for the firm's products in areas where there is a corporate, company-wide interest. **Robert M. Lawless** was made manager of purchasing for the **Midland Div.**

**Donald V. Fraser**, who rose from purchasing to the presidency of the **Missouri-Kansas-Texas Railroad Co.**, St. Louis, will re-

tire as board chairman May 5, after 45 years with the firm.

**Albert M. Townsend** has been appointed purchasing agent for **Pittsburgh Chemical Co.**, Pittsburgh. He had been with American Cyanamid Co. for 13 years and served most recently as plant purchasing agent at the firm's Bound Brook, N. J., plant.



A. C. SIEGEL A. M. TOWNSEND

**Arthur C. Siegel** has taken the post of director of purchases, **Highway Trailer Industries, Inc.**, Edgerton, Wis. He had been assistant to the director of purchases, White Motor Co., Cleveland.

**Thomas S. Wood, Jr.**, director of purchases, **Corning Glass Works**, Corning, New York, has been elected a company vice president.

**G. C. Bradshaw**, general purchasing agent at **Mallinckrodt Chemical Works**, St. Louis, has been assigned the additional post of assistant secretary for the firm.

**Edward Schumann** was made purchasing agent for **Mears Controls**, Portland, Ore.

**C. E. Hubbell** has been appointed manager of purchases and stores, **Wabash Railroad**, with headquarters at Decatur, Ill. Hubbell had been assistant purchasing agent.

**Harold Blackman** has succeeded **Douglas Boone**, who retired, as purchasing agent for the **Los Angeles City School Board**, Los Angeles. A former career officer in the U. S. Navy, Blackman was most recently in charge of the General Supply Depot in Oakland, Calif.

**Roger H. Paine** was named purchasing agent at Tacoma, Wash., by **Pennsalt Chemicals Corp.**

**J. M. Deam** has joined **Capital City Products Co.**, Columbus, as director of purchasing. Deam had been with Procter & Gamble.

**Clair V. Short** has been elected vice president-purchasing, **Armour & Co.**, Chicago. Short has been with the firm since 1932 and had been director of purchases since 1956.

**Embree Buntin** has been promoted to purchasing agent—Dallas by **Braniff International Airways**, Dallas. **Ross Westmoreland** becomes assistant general manager-stores. Advanced from buyer to senior buyer were **Russell W. Brown**, **Joe B. Fleming**, **Gerald Gregg**, and **Ruth Sidles**. **Sam Wester**, expeditor, was moved up to chief expeditor.

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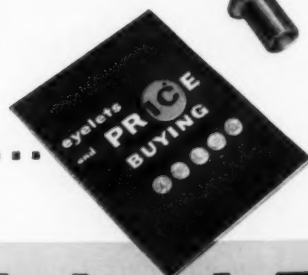
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## Industry News in Brief

### Armour Builds

**Cherokee, Ala.**—Armour Agricultural Chemical Co., a subsidiary of Armour & Co., has begun work on a nitrogen fertilizer plant here, which it says will be the largest of its kind in the nation. An Armour spokesman said that when the project is completed in 1962 as part of a \$60-million expansion program, the company's investment in the chemical field will, for the first time, exceed its investment in meat packing facilities at Chicago.

### Ingersoll-Rand Buys

**Allentown, Pa.**—Ingersoll-Rand Co. will expand its product line by acquiring Aldrich Pump Co. here, a manufacturer of reciprocating pumps for the petroleum and other industries.

### Interchemical Builds

**Charlotte, N. C.**—Interchemical Corp. has begun construction of 53,500 sq. ft. plant here that will have manufacturing, laboratory, office and storage space for three of its principal divisions—

Finishes, Printing Ink and Color & Chemicals.

### Gaylord to Reorganize

**San Francisco**—Crown Zellerbach Corp. said it will reorganize its Gaylord Container Div. along regional lines on July 1 of this year. Each region will have a general manager, who will be in charge of production and marketing in his area. There will be five regions: East, Southeast, Central, Southwest and Pacific.

### Harvey Signs Haizlip

**Kansas City, Kan.**—Harvey Aluminum has appointed Haizlip Jobber Suppliers, Inc., as a sales representative for its rigid conduit in the territory covering Kansas, Nebraska, western Iowa and western Missouri.

### Service Center Formed

**Pittsburgh**—A new steel service center, Cardinal American, Inc., has been formed here. The center will offer complete warehousing services and will handle bars, plates, structurals, and hot rolled, cold rolled and galvanized sheets and coils.

### Subsidiary Changes Name

**Neenah, Wis.**—Kimberly-Clark Corp. has changed the name of its wholly owned subsidiary, American Envelope Co., West Carrollton, Ohio, to Karolton Envelope Div. of Kimberly-Clark. In addition, the subsidiary's Moraine paper mill in West Carrollton has been integrated into Kimberly-Clark's Industrial Products Div. in order to separate paper production and envelope converting operations.

### Tidewater to Build

**New York**—Tidewater Oil Co. and Air Products, Inc. will build an oxo alcohol plant with a 60-million lb. annual capacity adjacent to Tidewater's Delaware refinery. Tidewater will provide raw materials and operate the plant, while Air Products will be in charge of design engineering and marketing of the plant's products.

### GMC Adds Line

**New Hyde Park, N. Y.**—General Materials Co., which specializes in stocking nonstandard metals and odd-sized items made of conventional materials, has become a distributor of titanium sheet and strip. General Materials warehouses in New Hyde Park; Hialeah, Fla., and Dallas.

### C-E-I-R Opens Center

**San Francisco**—C-E-I-R, Inc. has opened a new computing and business service center here in the headquarters building of California Packing Corp. C-E-I-R also acquired other computer facilities by merging with Computer Services, Inc., Englewood, N. J. In addition, C-E-I-R announced plans for acquiring Tabulating & Business Services, Inc., New York.



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## Meetings You May Want to Attend

### Previously Listed

#### MAY

**Edison Electric Institute Purchasing and Stores Committee**—14th Annual meeting, Shamrock-Hilton Hotel, Houston, Texas, May 15-17.

**Designing Engineering Show**—Cobo Hall, Detroit, May 22-25.

**Tool Exposition and Engineering Conference**—American Society of Tool and Manufacturing Engineers, Coliseum, New York, May 22-26.

**American Iron and Steel Institute**—Annual Meeting, Waldorf Astoria Hotel, New York City, May 24-25.

**Electronic Industries Assn.**—37th Annual Convention, Pick-Congress, Chicago, May 24-26.

**National Society of Business Budgeting**—Statler-Hilton Hotel, Dallas, May 25-26.

**Canadian Association of Purchasing Agents**—36th Annual Purchasing Conference and

Products Display, Royal York Hotel, Toronto, May 28-31.

#### JUNE

**National Association of Purchasing Agents**—46th Annual Convention and Inform-A-Show, Conrad Hilton Hotel, Chicago, June 4-7.

**Plastics Exposition**—Society of Plastics Industry, Coliseum, New York, June 5-9.

**Drop Forging Assn.**—Annual Meeting—Greenbrier, White Sulphur Springs, W. Virginia, June 14-17.

#### JULY

**Institute of Surplus Dealers**—16th Trade Show, New York Trade Show Building, July 30-Aug. 2.

#### SEPTEMBER

**Pacific Intermountain PA Conference**—Hotel Westward Ho, Phoenix, Ariz., Sept. 29-30.

## Supreme Court Refuses to Approve Union Attempt to Stop Rail Mergers

Washington—The U. S. Supreme Court refused to throw a roadblock in the way of railroad mergers. The court ruled that employees put out of work by an amalgamation can be legally fired if they are compensated properly.

The eight-to-one decision stymies one of a series of attacks on rail mergers by railroad unions. Justice William O. Douglas, in a dissent, described the case as a "minor episode in an important chapter of economic history" dealing with job displacement resulting from automation.

The case was brought by rail brotherhoods after the ICC approved merger of the Delaware, Lackawanna & Western Railroad Co. and the Erie Railroad Co. The Railway Executives' Assn. complained that provisions for employees displaced by the merger—under which fired workers got full pay for four years and workers retained in lower-paying jobs

would get the difference between old and new jobs—did not follow terms of the Interstate Commerce Act.

The unions claimed the act requires that no employee will be fired for at least the length of his appealed service up to four years after the merger.

Chief Justice Earl Warren, in reviewing the legislative history of the ICC Act and the provisions for displaced workers, said employees fired because of a merger which the ICC found to be in the national interest need not be maintained if they are compensated. "We are unwilling to overturn a long-standing administrative interpretation of a statute, acquiesced in by all interested parties for 20 years," the Chief Justice said.

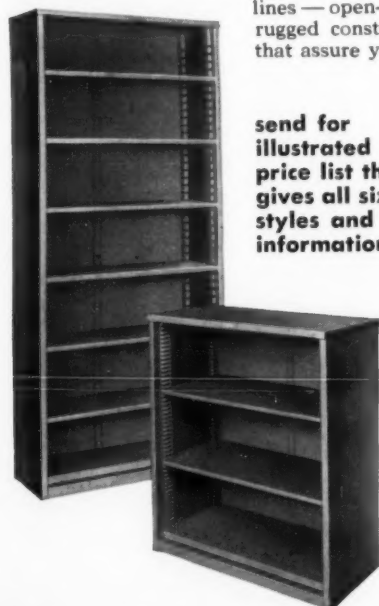
Douglas, however, suggested that Congress and the courts are by-passing pressing problems arising from automation and urged Congress to solve them.

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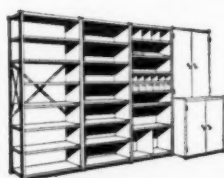


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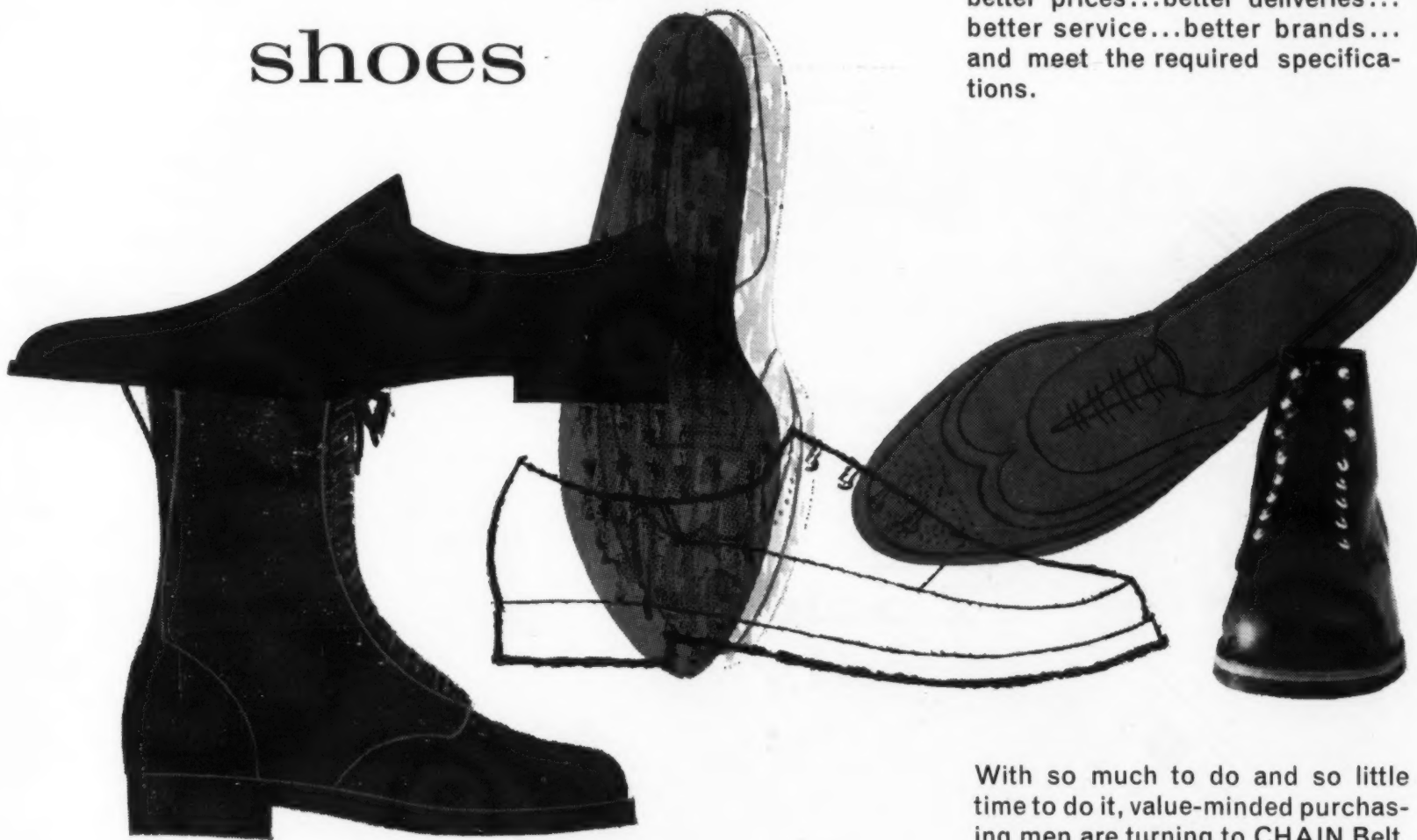
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## DALLAS PERSPECTIVE



**P/W BUREAU CHIEF MARVIN REID**  
Focuses a Purchasing Spotlight  
On the Bustling Southwest

**T**he Texas Gulf Coast petrochemical industry is accelerating its building and expansion program at a spectacular pace. Since last year 13 different companies have completed new plants or have expanded older facilities. Between now and early

1962, 45 more firms are scheduled to move ahead with new plants and expansions.

Some of the bigger ones planned: Celanese Plastics Co., will construct a \$15-million, 100-million lb. capacity acetyl chemicals plant at Bay City. Mobil Chemical Co. is completing a \$25-million ethylene plant at Beaumont. Monsanto Chemical Co. plans to finish a \$50-million petrochemical complex next year at Texas City, and Petro-Tex Chemical Corp. has finished one plant and started another at Houston, both described as multi-million-dollar units.

The Texas-Louisiana Gulf Coast petrochemical industry has had a tremendous growth in the last decade, mostly because the area has the raw materials, transportation and fresh water supplies this industry needs. It is estimated that \$4-billion has been invested in petrochemical plants on the Gulf Coast.

Despite all these plants and plans to build more, Gulf Coast developers believe the industry's potential for this area barely has been tapped. Most of the plants make products that are

shipped elsewhere for processing into consumer goods. The next development could be the location of consumer goods plants in the area.

To make sure the building boom continues, an outlay of \$40-million to harness the Trinity River has been planned. A large dam will be built, along with other facilities to pipe the water into the chemical plant areas. Houston's Chamber of Commerce says these facilities will add 1.2-billion gal. of water, sufficient to meet the needs of industry in a nine-county area for the next 50 years.

**It's good for the area that the petrochemical industry is booming because the Texas oil industry is still singing the blues.**

Dr. John Ryan, economist for Humble Oil & Refining, said during a panel discussion recently that the state's petroleum output may continue at depressed levels for at least two years. He said the state might be faced with a static producing outlook of around 100 days annually in the years ahead (roughly half of what it was prior to 1957).

**Dallas and nearby Ft. Worth are really buzzing about the impending merger of Ling-Temco Electronics, Inc., and Chance Vought Corp.** Businessmen also wonder whether Convair's Ft. Worth plant can survive the proposed defense budget.

Until shareholders vote in late June, neither Ling-Temco nor Chance Vought people can say much about their upcoming marriage. It does appear, however, that the combined firm may prove to be a business boon to the area.

Local sources point out that as separate firms both Chance Vought and Ling-Temco had trouble landing the big prime defense contracts. West Coast firms, with greater facilities and capabilities, were getting most of these, leaving L-T and CV to a large extent on subcontract business.

The combined firm, on the other hand, will be a giant outfit with assets around \$194-million. More important will be the combined capabilities, especially in such all-important areas as electronics and metallurgy. Both firms have been individually strong in these areas, and combining facilities and know-how should put the new firm on a competitive footing with the larger West Coast companies.

**In Ft. Worth, meanwhile, there is considerable concern over Convair's future.**

When President Kennedy sent his defense spending proposals to Congress, he did not include an outlay for an additional "wing" of B-58 bombers. Convair's Ft. Worth plant had been counting heavily on getting orders for another wing, which would amount to about 32 more planes. Unless the plant get an order later, B-58 production will probably expire in early 1962.

The production of this bomber has been the mainstay of Convair's Ft. Worth business. It would take a lot of subcontracts, or another big prime contract, to offset the loss of this business. Since the plant employs slightly over 17,000 people, most of whom are engaged in B-58 work, the potential loss has all of Ft. Worth concerned.

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Montreal, Toronto and Vancouver, Canada—A. C. Leslie & Co., Ltd.

# Air France Increases North Atlantic Cargo Runs

**New York**—Air France will increase its cargo handling capacity by 35% on North Atlantic flights.

Initial New York to Paris schedules call for flights to leave Idlewild Airport at 11:35 P.M. on Tuesdays and Fridays. Each air-cargo flight will carry up to 63,500 lb.

The announcement was made on the eve of the International Air Transport Assn. meeting, which is aimed at reaching agreement on lower cargo rates on this route. The talks in Montreal mark the third attempt by members of the IATA to come up with a new common cargo rate structure for North Atlantic flights.

Although most of the carriers want lower rates, two previous meetings broke up without suc-

cess because the airlines were unable to agree on the size or manner of the reduction. Unless the airlines are able to agree on a new rate structure before June 30, when their current schedule expires, an "open" rate situation will come about, with each airline setting its own tariffs.

In other air developments:

• U. S. airlines charged that the proposed grant of West Coast traffic rights to KLM the Dutch airline, would be "an unjustified give-away." KLM wants to establish a polar route from Europe

to Los Angeles and claims U. S. "freedom of the air" policies entitle it to a West Coast traffic point.

• Pan American World Airways told a federal court in New York that divesting the company of its 50% stock interest in Pan American-Grace Airways would be unnecessarily harsh. In addition, Pan Am claimed the action, which had been ordered by the court, would make it impossible for Panagra to merge with Braniff Airways as desired by the Civil Aeronautics Board.



**SPINNING THE WEB:** Polaris rocket motor case gets glass fiber filament winding treatment at new B. F. Goodrich Aviation Products layout. Goodrich announced it has set up complete engineering and production facilities in Akron for filament-wound structures used in the aircraft, missile and space flight fields because of their high strength-to-weight advantage and heat resistance. Technique shown above is 'biaxial' method which involves winding individually tensioned fibers.

## Continental Inaugurates Nonstop Flights Between Los Angeles and Texas

**Los Angeles**—Continental Airlines will inaugurate the first nonstop service between here and Houston and San Antonio on June 11. The CAB handed out the route to Continental in its recent allocation of regional and Southern transcontinental routes.

Continental will use Boeing 707's on the route, cutting the flight time from the West Coast to Houston to 3 hr. and to San Antonio to 2 hr. The new schedule, which calls for seven daily round-trip flights between Los Angeles and the two Texas cities, will replace the interchange service between California, Arizona and Texas which Continental has operated with American Airlines since 1951.

In addition, Continental will start operating on June 11 four daily round-trip flights between Los Angeles and Phoenix, two round-trip flights between Los Angeles and Tucson, and six between Los Angeles and El Paso.

## American Airlines Adds New All-Cargo Flights

**Los Angeles**—American Airlines has expanded its airfreight service out of Los Angeles with the addition of DC-7F all-cargo flights to New York via St. Louis and Cleveland and to Boston via Chicago.

The new flight to St. Louis and Cleveland enables shippers to make "same day" deliveries in those cities, an airline spokesman said. The service operates every day except Saturday and Sunday. American says the daily flight to Boston provides the fastest air cargo service available between Los Angeles and New England.

## TWA Expands Jet Fleet

**New York**—Trans World Airlines will expand its jet fleet by acquiring 26 new airliners for \$187-million from the Boeing Co. In addition, TWA said it will lease another four jets from Boeing.

Twenty of the new jets will be 131B models, which will be used for domestic service. The other six will be 331B long range jets for overseas service. The four leased planes will be model 120 intermediate range craft.

## GAYLORD packaging service is "right next door"

Wherever you are, there's a Gaylord Man nearby. He's always ready to lend a hand with any container project — plus a head full of practical knowledge about your entire packaging and shipping operation.

And he is backed up by a fully-integrated nationwide organization, staffed and equipped to give you complete service.

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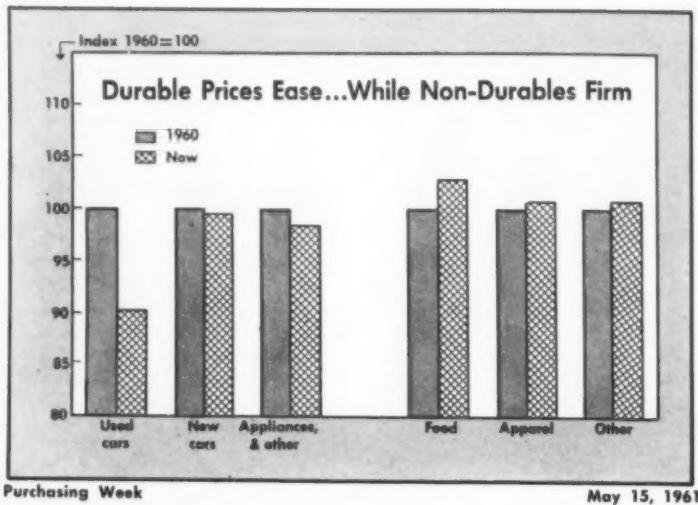


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## A P/W Indicator Analysis

# Stable Consumer Prices Aid Business Pickup

**New York**—Current stability in consumer prices is responsible for a substantial part of the current business pickup.

That's one point most business analysts are agreed upon today. Consensus is the current non-inflationary price trend (consumer tags have remained stable now for over six months) is helping out in many key business areas.

• **Wage rates**—A top corporate economist notes that much

of today's moderation in wage boosts can be traced to price stability. "When living costs are steady," says this expert, "the squeeze on consumer incomes eases; the result is much less agitation for wage increases."

Then there's the built-in "escalator" effect. A steady rather than a rising cost-of-living index is eliminating automatic wage increases for over 4-million workers whose contracts are tied to consumer price movements.

The results of this price-inspired moderation are already apparent. According to official government tabulations, the average industrial hourly wage has gone up less than 2% over the past year. That's one of the lowest annual rises in 15 years.

• **Purchasing power**—Consumer prices also have a direct effect on buying power. Every time a 1% rise in prices is averted, the buying power of the dollar is automatically stretched by a similar 1%.

According to one price analyst, the current six month period of price stability has been worth \$1.8-billion to U. S. consumers. That's the amount of purchasing power that would have been lost if the average postwar consumer's price rise had continued over the past six months.

• **Buying incentive**—Here, too, steady consumer tabs are playing a role. That's because the desire to buy is directly connected to the price level.

According to the Michigan Consumer Survey, buyers are usually more prone to spending when they feel that prices are low.

And right now, that's exactly how they feel. The latest Michigan survey, for example, notes that more people now think it's a "good time to buy" than in the comparable periods of the 1953-54 and 1957-58 business cycles.

### Key Hard Goods Prices Down

A closer look at the commodity section of the cost-of-living index reveals why consumers are relatively satisfied with prices. As the chart alongside shows, all key hard goods areas are below year ago.

Used cars, for example, are running 10% below 1960. New cars are down fractionally. And the "appliance and other" category is down almost 2%.

This situation is different in soft goods where prices are up about 2% over the year. But rises are generally less important in this area because they involve necessities like food and apparel. These are generally purchased in steady amounts despite price fluctuations.

What's ahead for key cost-of-living index? The experts generally are agreed that the currently helpful stability can't be expected to continue much beyond summer.

First, hard goods are bound to rise in line with improving demand. In fact, there are already signs of this. One estimate, for example, notes that about 50% of the appliance reductions made over the past year have been rescinded.

Then there's the service element. Items like rent and medical care never really stopped rising. They just have been masked by the drop in other price components. Over the past year they've gone up 2%; and there's no sign of any change.

This growing service pressure is really beginning to make a dent on income. Currently, services take 38.2% of disposable income. Five years ago the comparable figure was only 34.1%.

**NOTE TO USERS OF LOW CARBON FLAT WIRE**

Here's a way to give your products a competitive edge. Use Roebling Low Carbon Flat Wire. Roebling can supply it in a wide range of tempers, as well as in bright, galvanized or copper-coated finishes. Special shaped edges can be rolled.

Quality is always uniform because Roebling controls every step of production starting at the open hearth. Cash in on Roebling's engineering and metallurgical experience.

Write for full details to Roebling's Wire and Cold Rolled Steel Products Division, Trenton 2, New Jersey.

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The Colorado Fuel and Iron Corporation

## Educational Buyers Hold Convention; Discuss Problem of Identical Bidding

**St. Louis**—The problem of protected prices was one of the main topics of discussion at the 40th annual convention of National Assn. of Educational Buyers.

Delegates criticized manufacturers who protect "suggested" selling prices by giving exclusive distributorships in each area and then crack down on any seller who violates these prices.

"Many of us are getting around these situations by asking for bids on a 'package' that contains a lot of nonfranchised items along with those products which have protected prices. As a result, considerable price cutting is done on the NF-items which brings competition into the business," declared one NAEB delegate.

"We also can work around the 'frozen-price barrier' by using 'trade-ins,'" declared another. Another technique is to throw in some 'no-charge' items in the nonfranchised product groups.

An increase in imports on high-quality technical equipment used in the scientific areas also is creating more competition in this field of products. C. Leon Smith, purchasing agent for the University of Buffalo, suggested P.A.'s should watch the imports for good buys in technical equipment.

The question of centralized purchasing at the city or state level for schools in conjunction with municipal agencies brought mixed comment.

R. H. Tollerton, purchasing agent for the Rochester (N.Y.) Institute of Technology, said: "City and state agencies can buy economically for all tax supported agencies when coal or fuel oil is involved. However, the wide variety of technical products needed in colleges necessitates expert buying at the school level."

## El Paso Assn. Names C. R. Glenn as President

**El Paso, Tex.**—C. R. Glenn, Triangle Electric Co., was elected president of the Purchasing Agents Assn. of El Paso.

Other new officers are: William Thompson, El Paso Natural Gas Co., first vice president; R. A. Brochu, Graybar Electric Co.; second vice president; E. J. Fallon, Standard Oil Co., secretary; and Mrs. Addie P. Ross, State National Bank, treasurer.

Edgar Chew, City of El Paso, is national director and his alternate is R. E. Redman, American Smelting & Refining Co.

## Wilmington Elects Barrett

**Wilmington, Del.**—Melvin Barrett, Delaware Power & Light Co., succeeds Emerson L. Morris, Hercules Powder Co., as president of the Purchasing Agents Assn. of Wilmington. Morris becomes national director.

Serving with Barrett will be Robert W. Johnson, Hercules Powder Co., vice president; and A. W. Storrs, Laird Bissell & Meeds, treasurer. Frederick J. Graf, Du Pont Co. was re-elected secretary.

The co-operative buying service maintained by the NAEB for its members is "one step in getting better prices in today's market," declared Elmer Jagow, newly installed president. Jagow, who is business manager of Knox College, said the association co-op handled over \$7,500,000 in orders for members last year at savings of 8% to 10% on the average.

More than 375 delegates attended the three-day meetings.



**INSIDE STUFF:** J. J. Ritterskamp (l), convention chairman and Bruce Partridge, University of Delaware, examine mattress exhibited at NAEB convention.



**TIPS ON CHAIRS:** Wendell Davis (c), president of Steelcase, Inc., explains advantages of steel chairs to prospective buyers at another product exhibit.

## Bartlett Chemicals, Inc. gives chemical buyers service with speed...from ample stocks



Pumping liquid caustic directly from tank car on Bartlett's railroad siding

When the teleprinter begins crackling at Bartlett Chemicals, Inc., a trained staff of chemical specialists swings into action. Chemical orders wired into the New Orleans office of this progressive distributor are processed immediately from ample stocks controlled by a continuous inventory system. The company maintains warehouses at Shreveport and Lafayette, Louisiana, for swift deliveries of liquid caustic and other chemicals to the oil and sugar industries of Louisiana, southern Arkansas and Mississippi.

Typical of the cost-cutting procedures is the use of ultra-modern 3,600 gallon tank carriers for liquid caustic. This equipment, with all-stainless steel meters, services more customers, in fewer trips and at lower delivery costs.

Bartlett Chemicals, Inc. is typical of the outstanding chemical distributors handling Mathieson chemicals. We will be pleased to tell you about a distributor in your area. Write OLIN MATHIESON, Baltimore 3, Maryland.



By phone or wire, orders are handled speedily



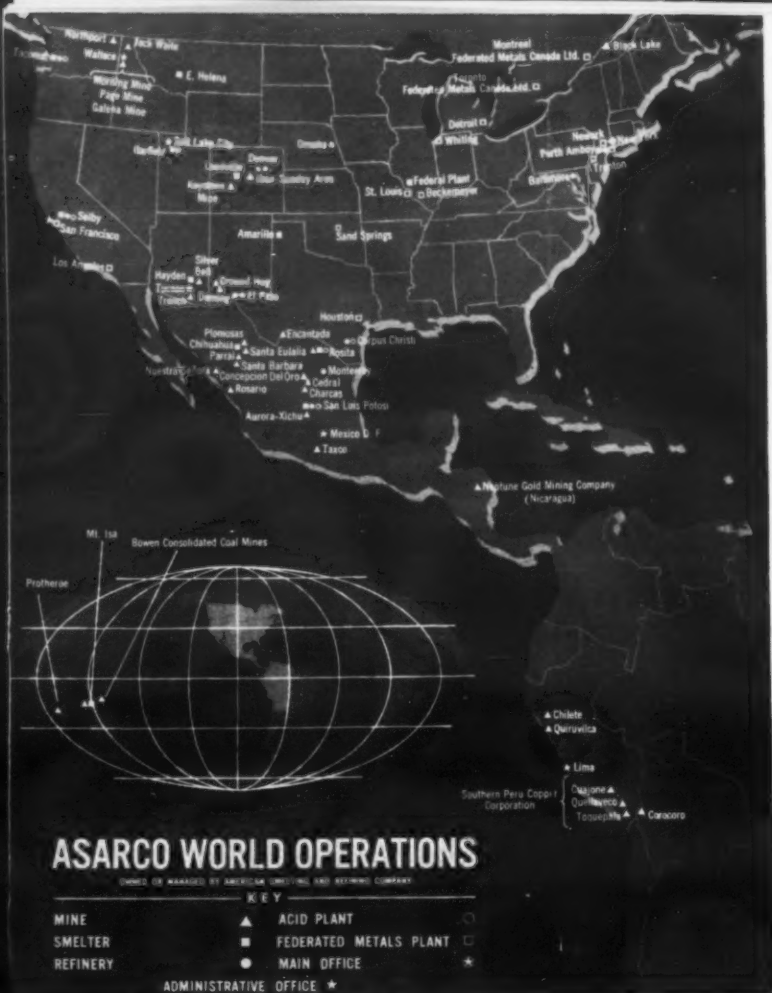
A last minute route check for a caustic delivery

**Olin**  
CHEMICALS DIVISION

**MATHIESON CHEMICALS:** Ammonia • Sodium Bicarbonate • Carbon Dioxide • Caustic Soda • Chlorine • Formaldehyde • Hydrazine and Derivatives • Hypochlorite Products • Methanol • Muriatic Acid • Sodium Nitrate • Nitric Acid • Soda Ash • Sodium Chlorate • Sodium Chlorite Products • Sodium Methylate • Sulfur (Processed) • Sulfuric Acid • Urea

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# Why ASARCO P.A.'s Have

*Most companies leave their purchasing departments out in the cold when time comes for major capital expansion. But ASARCO P.A.'s are in on tough capital buying jobs from the time plans are drawn. Engineering helps out with a scientific evaluation scheme that gives purchasing tools for negotiation.*

Centralized control of capital-goods buying has enabled American Smelting & Refining Co. consistently to save on construction estimates in its booming three-continent mining development.

ASARCO P.A.'s attribute this cost-cutting performance to the rapport they have established with the company's central engineering staff. This team approach to capital buying—forged in New York by ASARCO's top purchasing executives—has been case-hardened by experience in the field.

Given top-level authority under a vice president for purchasing, ASARCO's New York purchasing department has uncommonly broad prerogatives. It has combined the best features of centralized and decentralized control. While the regional plants and offices are free to procure small maintenance items under an arbitrary ceiling of \$2,500, the New York office coordinates large-lot buying on everything from hospital supplies and household appliances to rock crushers, earth movers, and copper converters. Purchasing, though it works hand-in-hand with Engineering in the planning and evaluation stages, retains final authority to select suppliers.

Francis H. Eichler, vice president for purchasing, sits on a department-head advisory committee which, among its other functions, reviews and approves capital expenditure appropriations. ASARCO's board chairman and president, J. D. MacKenzie, is committee chairman.

Eichler has developed a system which:

- Uses a P.A. with broad engineering knowledge and field experience to troubleshoot on specifications and bids.
- Requires that requisitions submitted by Engineering be pared of all but vital, "pivot" specifications, so Purchasing can negotiate with a free hand.

- Through close liaison with Engineering, seeks all parts and components which can be bought in "consolidated" lots to serve many different equipments. Examples: electric motors, switchgear, V-belts, control equipment.

- Solicits bids from a broad spectrum of domestic and foreign vendors.

- Submits all bids over \$5,000 to the Central Engineering Dept. for evaluation. Engineering gives minute attention to design, price, delivery, escalation, and future service terms, then prepares a bid tabulation form which lists bids in groups of first, second, third, and unacceptable choices. Purchasing is free to negotiate the final buys among the acceptable bidders (see sample form, below).

- Buys components where possible, on a "consolidated order," whenever this method can yield savings.

One of ASARCO's toughest purchasing assignments came in 1955. Southern Peru Copper Corp., of which ASARCO is a majority stockholder, called upon Eichler's staff to buy all the equipment and materials for a \$237-million copper mining project.

The Cordillera de los Andes mountains of Peru—remote from the goods and amenities of civilization—conceal rich copper reserves. Southern Peru picked a site called Toquepala, 60 miles inland and 10,650 feet up from a Pacific bay, Ilo. Its field engineers excavated an open-pit mine from beneath 130-million tons of rock "overburden." They built a large concentration mill near the mine, and a complete townsite for Toquepala's 1,100 families and 450 single men, including shops, warehouses, homes, roads, supermarkets and schools, a hospital and a recreation center.

Southern Peru also laid a 110-mile railroad link to Ilo, where it built a fuel-oil fired power plant, a copper smelter with 140,000 tons-per-year capacity, and another soup-to-nuts townsite.

**BID TABULATION: 8.8 Dynamuddle, 700 Synthapostle Agglutinator (Slurry-Slough Action)**

Item No. / Specification							Evaluation by Choice				
Bidding Company	(1) Base Price	(2) Slurry-Slough Test	(3) Vibration Test	(4) Test-Total	(5) Delivery in Weeks	(6) Evaluated Price	Price	Delivery	Design	Repair Facilities	Total Points
ALEWIFE INDUSTRIES	\$17,674	100%	.03%	Good	10	\$18,150	2	1	1	1	= 5
BORSCHT CIRCUIT-BREAKER	\$15,000	100%	.12%	Acceptable	31	\$23,886	4	4	2	1	= 11
CANOMILE CORP.	\$16,590	100%	.03%	Good	12	\$17,956	1	2	1	1	= 5
DERVISH DYNAMICS	\$14,119	75%	.25%	Poor	13	\$19,889	3	3	3	1	= 10

**HYPOTHETICAL BID TABULATION:** Engineering submits requisition to Purchasing with 'pivot specs' listing desired performance characteristics such as above. Purchasing's job

then is to negotiate a buy with low scorers on basis of 'evaluated price,' which estimates maintenance cost over equipment's life. More than one bid can be rated first choice.

# Such a Big Say in Capital-Equipment Decisions

During the planning stages, ASARCO's New York purchasing department set up liaison with Sterns-Rogers, Inc., the Denver engineering-consulting firm ASARCO had retained to design and subcontract Toquepala and Ilo. ASARCO engineers in Denver provided the communications link.

Purchasing first called in a summary requisition for electric motors, including motors which ordinarily come installed in heavy machinery. Engineering promptly replied with a list, broken down into "pivot" specification categories according to horsepower, rpm., voltage, and similar technical data.

Purchasing solicited electric motor bids, passed them on to Central Engineering for bid tabulation, made its choice and committed the money—approximately \$1.5-million—before a spade had been turned at Toquepala. Purchasing followed the same pre-construction pattern with other such standardized items as V-belts and starters. "Consolidated buying" saved an estimated 15% and more on electric motors alone, compared with the amount Purchasing would have paid had it bought motors as installed components of original equipment.

Arthur V. Cohenour, a P.A. in on the Toquepala job from the start, says, "We now feel, having wet our feet in this sort of capital buying, that a sharp purchasing outfit, in from the beginning on a plant job with close liaison with Engineering, ought to be able to make all its agreements for the entire job in a very short time." Cohenour, new to purchasing, is a graduate civil engineer, with additional academic grooming in electrical and mechanical engineering, and five years' experience in ASARCO's Plant Engineering Dept.

James C. Traister, Eichler's assistant—also a graduate mechanical engineer—said in a recent speech on capital equipment buying, "One of the strongest things a purchasing man can have is a technical background. You have to talk the language of men you're buying from—technical salesmen—and of the men you're buying for—company engineers."

Purchasing, to avoid discouraging potential future supply sources, arbitrarily split its bid award on electric motors between two acceptable suppliers. Then, it maintained liaison with engineers in each manufacturer's plant, to expedite and clear final specifications.

Purchasing followed through on a subsequent project, the Mission copper mine, 14 miles southwest of Tucson, Ariz., in much the same way. Eichler says that tight monitoring by both Purchasing and Engineering enabled \$290,000 to be saved on 12 units of one type of heavy equipment. ASARCO engineers evaluated the relative merits of the machine's components as presented by the several bidders. Purchasing then picked the lowest reasonable price based on market studies of each component, and worked up a total cost estimate. This was a composite "mock-up" of the lowest-cost parts. Purchasing, by using this estimate in its negotiations with acceptable suppliers, was able to bring unit prices in line with its own valuation.

Experience on these large projects helped Purchasing and Engineering refine

their joint methods without infringement of either's autonomy. When Engineering believes only one manufacturer's equipment is acceptable, it so states on the initial requisition, and gives its reasons. "Purchasing gives and takes a bit, because it values the engineers' participation in narrowing down bids," explains Cohenour. However, ASARCO policy channels all departmental and division requests for vendor information through Purchasing. When, say, an engineer at the Hayden smelter, in Arizona, wants to get design data on a blast furnace, he sends a "service request" form to New York, where the P.A. contacts the manufacturers and gets the desired information.

ASARCO's purchasing department values the end-user's opinion. "Operators should have the final word on the selection of equipment," says Eichler; "Nothing should be shoved down their throats." Accordingly, after Engineering has narrowed the field down to a bid tabulation list of acceptable suppliers, Purchasing solicits operator preferences. "In 90% of the cases," continues Eichler, "the operator agrees with Engineering's evaluation."

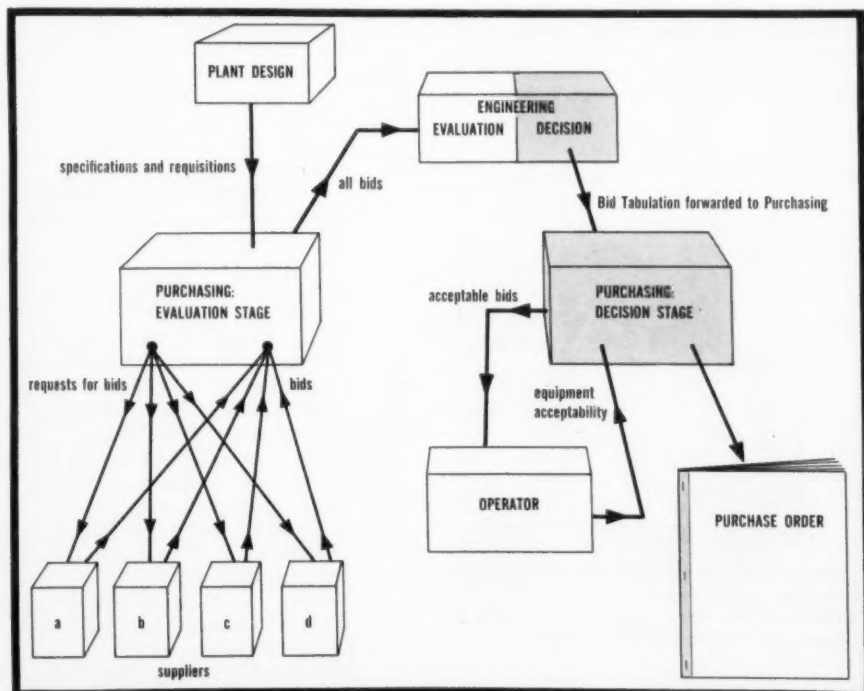
Eichler, a trained lawyer with experience in ASARCO sales and manufacturing, has written a purchasing policy manual which clearly delineates responsibilities. The top buyer realized when he joined ASARCO purchasing that his department could reap more consistent savings from a scientific, centralized purchasing control program than from strict centralized buying. According to Eichler, ASARCO's regional plants realized that the New York P.A.'s were able to get better prices and services, both because of their vantage point on world markets and their ability to consolidate buying for different locales.

When, in a few early cases, ASARCO's regional personnel sought quotes on equipment, Purchasing found that New York suppliers were extremely reluctant to back down from prices their branch salesmen had given. Such "back-door" solicitation seriously hamstrung ASARCO's negotiating strength; as a result, Purchasing confines regional buying to minor maintenance supplies, and lets the branch offices and plants manage order-releasing against major blanket purchase agreements negotiated and concluded in New York.

Once a buy gets to the negotiation stage, Eichler's team makes sure it spells out ASARCO's conditions on the purchase order. "Too many P.A.'s rely on the seller's goodwill to clear up questions not settled in advance," says Traister. ASARCO purchase orders leave no room for supplier "interpretation" of delivery, quality, or service terms.

As Eichler says, "In a pinch, we consider delivery first, price second. We stand or fall on our scheduling services, and so we will not tolerate late or delayed delivery."

Eichler feels strongly that a company with specialized departments should use their services to the fullest extent. Traister adds, "If a company is going to reap the advantages of scientific buying, the purchasing department must be prepared to participate from beginning to end."



**TYPICAL ROUTE OF REQUISITION:** Flow chart above shows how requisition moves in smooth sequence from plant design to purchase order through various intermediate stages.



**TYPICAL PURCHASE:** 55-ton truck, slated for ASARCO's Mission Mine in Arizona, gets once-over from George Rafos, ASARCO P.A., on an expediting trip to manufacturer's plant.



## PROFESSIONAL PERSPECTIVE



CONSULTANT DR. CLYDE T. HARDWICK

Professor of Economics, University of Detroit

Interprets This P/W Headline:

**'New Package Puts Safer Ingredients Into Economic Forecasting'**

(P/W April 24)

**T**he purchasing agent is a practicing economist; he lives, works and dreams in the world of applied economics. Even though he may not realize it, his buying decisions are determined by the forces charted by the 26 indicators described in the April

24 issue (pp. 26-27). And management more and more expects him to take forecasting into account whenever he makes a buying decision. Future business conditions intimately involve markets, prices, costs, competition, profit and value connected with a procurement.

Old-time buyers who dismiss such techniques as too academic or global for the down-to-earth needs of the P. A. are missing a very important point. The purchasing agent lives in two economic worlds. One is the world of macroeconomics—the economic big picture—which is charted by such techniques as those devised by Dr. Geoffrey H. Moore and the National Bureau of Economic Research. The other is the more limited world of microeconomics—the individual business firm—which is the P. A.'s home ground.

Admittedly, the world that's measured by NBER indicators is beyond the P. A.'s control—but a knowledge of the forces at work in it can furnish a sound basis for the purchasing decisions that affect the levels of company inventories, timing of orders,

selection of markets, placing of orders with big or small businesses, prices paid, and the like.

It seems to me, the purchasing agent first must understand the economics of his firm and then build a bridge of understanding to the side of the national or aggregate happenings. The purchasing agent who knows how and at what rate his company is moving in comparison with the national figures can better time his actions for the protection and growth of his company.

### Practical Steps

In this line take several practical steps: First, each buyer take advantage of his day to day experience and learn to utilize some everyday clues to business trends such as the following:

- Softness in negotiating.
- Meeting of delivery dates.
- Need of follow-up activity.
- Back orders and shortages.
- Number of calls per salesman per month.

• Ease or pressure on transportation service.

• Number of days supply of major items being bought.

- Demand for products (sales).

Secondly, the director of purchasing can encourage the collection and charting of statistical series derived from his own company's experience, including: company sales, inventories, purchases, and employment, as well as price movements of major commodities, activities of major suppliers, number of orders, dollar average of orders, retail sales, local employment, and the like.

Then these charts can be put on transparent vellum which can be used as "overlays" on national indicators to determine degree of agreement or disagreement in trends. Whenever trends over a reasonable length of time appear to be in agreement, then the purchasing department should watch these selected national charts to determine whether there's a cause and effect relationship between the two sets of statistics.

### Trial and Error

Suppose there is a direct relationship between the company's dollar volume of sales and dollar volume of purchases. How do you link company purchases to some of the national indicators? Through trial and error, compare a plotting of your purchases against the national charts until you find a correlation or at least a simple degree of agreement. This could be NBER indicator No. 9, New Orders for Durable Goods. Watch this national indicator closer in the future to assist in making buying decisions.

What if there is no obvious relationship between national indicators and your dollar volume of purchases? Then introduce some other local statistical series to discover an indirect relationship. This might be retail sales, employment, bank clearances, consumption of electrical current and the like. Compare these to the national indicators to find trends, which in turn may be related to movements in your volume of purchases.

A third way is to introduce a fourth set of factors, which might be called "company buying indicators," such as statistical charting of company prices paid for major products, local inventories, number of purchase orders, movements in specific markets, activities of major suppliers, and the like.

## Fruehauf Reefers with 4" of Sanistruct Insulation Approved by MINUTE MAID!



For the first time in its history, Minute Maid Corporation, Orlando, Florida, has permitted reefers with only 4" of insulation to transport its frozen products. The reefers—twenty-two Fruehauf Model "D" Volume☆Vans—have 4" of Sanistruct, an exclusive Fruehauf advancement in high quality, low-temperature insulation. These trailers are the only 4" insulated trailers in operation that have been able to meet Minute Maid's rigid low-temperature specifications.

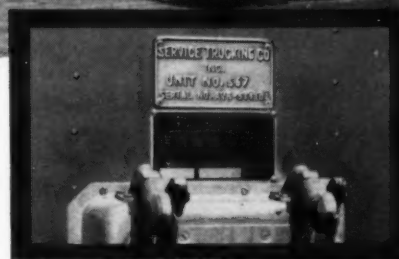
The new 1961 Fruehauf Model "D" refrigerated Volume☆Vans are operated by Service Trucking Company, Inc., Federalsburg, Maryland, common carriers hauling for Minute Maid. The 4" Sanistruct insulated units have 125 cubic feet more inside cargo space than the 6" insulated reefers previously used.

Regardless of commodity hauled, distance traveled, or temperature demanded, Fruehauf has the reefer to do *your* refrigerated hauling job better! Fruehauf reefers are specifically designed to meet your exacting requirements in size, weight, cost, construction, and insulation efficiency.

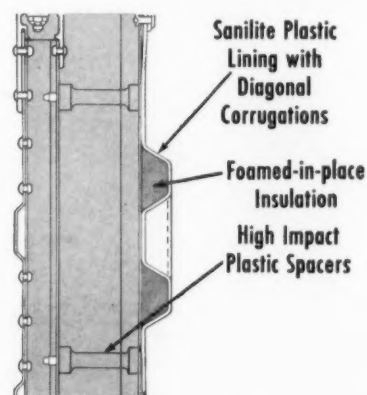
Ask your Fruehauf salesman about the Model "D" reefer, and about the many other insulated Volume☆Vans, today!



**Fruehauf—  
The Key to  
Transportation  
Savings!**



The brass tag is Minute Maid Corporation's "Stamp of Approval," the result of extensive tests conducted by Stan Shillings, Minute Maid's Refrigeration Foreman, signifying that this Fruehauf reefer with 4" of Sanistruct insulation meets Minute Maid's low-temperature standards.



Sanistruct Sidewall Construction—Air circulates throughout inside because of diagonal corrugations of the lining. Cooling loss reduced because of no through-metal contact.

## Wisconsin Management Institute Planning to Emphasize Purchasing

**Madison Wis.**—The Management Institute of the University of Wisconsin will put the spotlight on purchasing next year.

An advisory committee of leading purchasing men and business educators has developed a seven-course program on purchasing and materials management for the 1961-62 school year.

Prof. William P. Stillwell, director of the institute, pointed out that the seminar program has been brought up to date to include courses on conflict of interest and the impact of automation.

The entire program also has been streamlined to underline basic management areas. For instance, there will be less concern about fads, Prof. Stillwell explained, more stress on "meat" in purchasing. He also noted that management emphasis is shifting from the human element to the administrative, a fact which has been instrumental in shaping the new program.

The program for 1961-62 includes: the Special Invitational Materials Management Group (a four-year program), the Purchasing Series, a series of six one-day meetings, including one or more two-day sessions, a five-day Purchasing Techniques Workshop, a one-week Workshop on Value Analysis presented in cooperation with NAPA, a one-week seminar on the Purchasing Administration and Materials Management Workshop, a three-day seminar for top executives on Materials Management, a special program for top purchasing people from large companies, emphasizing broader aspects of procurement with attention to future developments.

Topics covered in the one-day Purchasing Management Conference Series will include: Purchasing Policies and Ethics (conflict of interest), Fringe Functions of Purchasing, Impact and Implications of Automation, Purchasing Communications,

Purchasing Negotiations, Education (training and development of buyers).

The University of Wisconsin was the first to organize an extension program in management training. MI began in 1944 with the help of the federal government, developing out of the critical situation in the supervisory areas of management due to the war.

More than 6,000 persons attended MI events last year.



**WISCONSIN MANAGEMENT INSTITUTE:** Members, (l-r): Andrew Kolar, Link Belt Co.; Dr. I. V. Fine, Univ. of Wis.; Fred Brewer, A. O. Smith Corp.; J. V. Chiles, Hiram Walker & Sons, Inc.; Prof. W. P. Stilwell, Univ. of Wis.; Lyall Stilp, Kimberly-Clark; A. E. Belter, Hotpoint Div., General Electric; Harold Jungbluth, R.T.E. Corp.; Hal North, Victor Mfg. & Gasket Co.; Absent: G. E. Andrews, Barnes Drill Co.; Wm. Mohaupt, Lakeside Laboratories; Lloyd Pinkowsky, Four Wheel Drive Corp.

Increase Recordkeeping  
Speed and Accuracy!  
Take Your Choice  
Free Sample

## EASY VISION PADS

"Both pads for sale at  
National Stationers"



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Dept. 2703, Holyoke, Massachusetts

Please send me a **FREE SAMPLE PAD** (6 column ruling)  
This offer expires December 31, 1961

I choose **EYE-EASE** ☐ I choose **20/20 BUFF** ☐

NAME..... POSITION.....

COMPANY..... STREET.....

CITY..... ZONE..... STATE.....

My stationer's name is .....

## Study Shows Additives Cut Costs, NIPG Says

**Denver**—Use of fuel and oil additives in Denver police cars during a 1½-year test period resulted in better performance and lower maintenance costs, said the National Institute of Government Purchasing.

Reporting on a study made by the Denver Dept. of Public Service, NIPG said:

- Automatic transmission repairs were cut over 50% through use of transmission additive.

- Carburetor maintenance was reduced by using an additive for "regular" gasoline. In addition, in a special two-month test, five police cars averaged from 1.4 to 2.2 more miles per gallon when the additive was used.

- Crankcase sludge and valve lifter trouble were reduced by using a motor oil supplement.

The NIPG also noted a possible, but as yet unproven, side value: Equipment using these additives may emit less hydrocarbon, thus alleviating the air pollution problem.



## Aircraft Armaments, Inc., Zeroes In On Vendors' Quality Control Setup

Cockeysville, Md. — Quality control and purchasing have joined forces at Aircraft Armaments, Inc., to see to it that vendors keep their own quality control systems up to par.

With Blaine M. Swartz chief of procurement, acting as go-between, AAI's quality control specialists visit vendors' plants to check on acceptance quality levels (AQL), feedback channels, and systems for handling rejects. In some cases, Donald J. Valloton, quality control director, assigns AAI inspectors to sit in during the setting up of a supplier's quality control program.

### Checkoff List

Each AAI inspector carries a facilities checkoff list that covers the following areas:

- Vendor's inspection organization.
- Vendor's inspection equipment.
- Vendor's control over parts he subcontracts to other suppliers, if any.

Here is the way the AAI system works:

The AAI inspector ticks off each item on the checkoff list and then sends his report on the plant to Valloton, who evaluates it to see how the vendor's quality control setup can be improved.

If acceptance levels of incoming materials continue to fall off after the improvements have been made, purchasing again requests quality control to step in. In one recent case, carbon component resistors were turning up with a high percentage of rejects. Purchasing complained to the manufacturer and found that these parts were passing assembly inspection without difficulty.

Quality control representatives, acting on Swartz's information, called on the vendor to investigate. They found that before shipping, the carbon components were stored in a bonded warehouse and, despite precautions, picked up enough moisture to fail inspection. Through the efforts of the quality control department, the vendor agreed to install a bake oven and dry out all carbon resistors before shipping to Aircraft Armaments.

### Effective Operation Needed

But before you can get this kind of assistance from the quality control department, you have to have an effective system in operation. Says Valloton, "The main reason for faulty material is that the supplier does not understand your requirements or else doesn't believe that you intend to demand the quality level previously agreed on."

To overcome this problem the P.A. and management first must determine the quality levels of incoming material, advises Swartz. Then purchasing must get the vendor to agree on definition of defects and acceptables. Here's the procedure Swartz and Valloton suggest for getting a working quality control system:

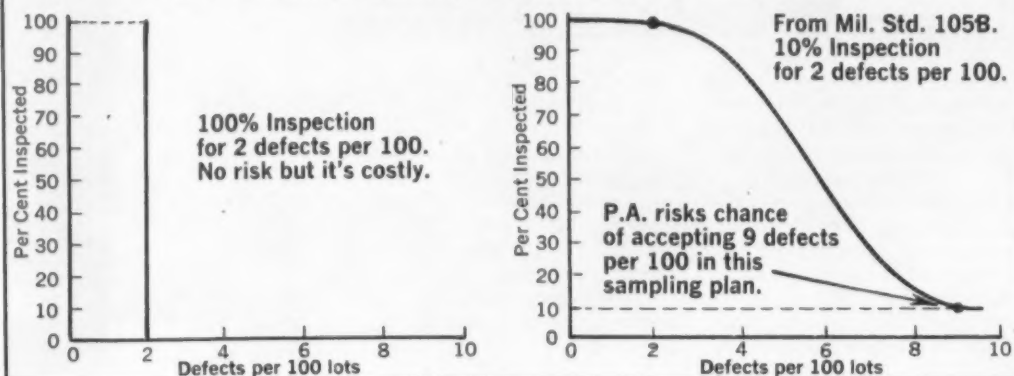
- Determine AQL.
- Define this level and agree with your vendor on terms.
- Decide on a sampling plan and inspect shipments as received.

- Keep a history of the vendor.
- Make sure the vendor continues his out-go inspections.
- Determine vendor certification standards and procedures.

After establishing AQL, the next step is adapting the proper sampling method. AAI (and many other firms) uses the plan set up by the government under Military Standard 105-B. Although originally developed for use by military inspectors, Mil.

(Continued on page 25)

### How to Share Quality Control Risk with Vendors



## PURCHASE ORDER

VENDOR		SHIP TO	
F.O.B.		TERMS	
SHIP VIA		ORDER DATE	
PLEASE MAIL INVOICE IN DUPLICATE ON DATE OF SHIPMENT ADDRESSED TO ACCOUNTS PAYABLE		VENDOR NO.	
THIS ORDER IS NOT SUBJECT TO RE-NEGOTIATION UNLESS SPECIFIED BELOW		TAX COMMODITY	
T - TAXABLE E - EXEMPT		DESCRIPTION OF MATERIAL AND/OR SERVICES TO BE SUPPLIED	
ITEM	QUANTITY	SUBJECT TO ALL THE TERMS AND CONDITIONS ON FACE AND BACK HEREOF AND ATTACHED HERETO, ALL OF WHICH ARE PART OF THIS ORDER.	
THIS ORDER IS NOT BINDING ON PURCHASER UNTIL THE ACCEPTANCE COPY IS IMMEDIATELY SIGNED MANUALLY BY THE PURCHASER AND RETURNED TO THE SELLER.		ORIGINAL PURCHASE ORDER	



# BRIDGEPORT B

## Tank Truckers Urge Greater Stress On Special Service, Price Packages

Cincinnati—Greater attention to special needs of customers and more attractive price packages were urged on truckers at the annual National Tank Truck Carriers convention here.

Ralph J. Andreas, traffic manager for American Oil Co., said the truckers had better quit crying about the competition and adapt to it. He proposed adoption of volume tender rates to prevent diversion of freight from the trucking industry.

Taking up this theme, W. E. Johnson, president of NTTCC, said the only way truckers can recapture private carrier traffic is to offer better services at lower rates.

Highway taxes were another major topic at the three-day meeting. John J. Gill, president, American Trucking Assn., complained that highway users were being taxed doubly because of the failure of federal and state governments to give consideration to each other's tax programs.

## Rockwell Sets Up Drill Press Trade-In Plan

Pittsburgh—Rockwell Mfg. Co. has set up a program for trading in used drill presses on purchases of new ones made by its Delta and Walker-Turner divisions.

To assist the 1,500-odd distributors who will handle the program, Rockwell has compiled a "blue book," which lists suggested values for drill presses by type and year.

A company spokesman said the suggested values average about one-half the original price of the tools. For example:

• For 14-in. drill presses, the

trade-in value of a prewar model would be about \$20, while the value of a five-year-old press would run around \$60, with the exact amount depending on whether it is a floor or bench model or has a standard or production table.

• For 17-in. drill presses, the suggested value of a model made in 1937, the year in which Rockwell started this line, would be about \$45, while a five-year-old model would be valued at between \$130 and \$200.

While the blue book gives

prices only for tools produced by Delta and Walker-Turner, Rockwell expects dealers participating in the program also will offer trade-ins on drill presses made by other manufacturers. Operation will be entirely in the hands of the distributors, Rockwell emphasizes, and in the final analysis the price they allow on trade-ins will be governed by the condition of the used tool market.

Interest in this market has spurred other sales developments. For example:

• Industrial Machinery Data Service, Inc., Boston, has started a clearing house for used machine tool information. Users list the machines they wish to sell, buyers list the machines they want, and the specifications of each are fed into a computer and matched. Both buyer and seller pay IMDS a \$10 registration fee for each listing plus 5% of the sale price they agree on.

• Fairbanks Whitney reported that its new plan for accepting used tools of any manufacturing origin as credit on purchases of new Pratt & Whitney machine tools has met with "terrific response."

## What do you miss most in BRASS BUYING?

Emergencies or sudden non-routine requirements often run into frustrating delays in getting fast service. Small-lot buyers may not get help in alloy selection or dependable delivery information. Large volume purchasers often face "big company" inertia when special delivery or production service is urgent. Our unique "Direct Line" policy eliminates these problems because salesmen or deskmen can call our technical management or our mills directly, when necessary, for prompt authoritative answers. This fast-response service can work well for you. Call Bridgeport Brass Company, Bridgeport 2, Connecticut... offices in all principal cities.



### THINGS TO KNOW IN BRASS VALUES

**DURONZE 707 Works Hot Like Glass  
...But Cools To Strength Of Mild Steel!**

- Only moderate heat in the gas-flame range is needed to soften this unusually tough, strong and lighter bronze.
- Hot DURONZE 707 can be bent, coiled, flattened or shaped more easily than soft, ductile copper.
- Just by letting it cool, it is again as strong as many mild steels, has excellent corrosion resistance, and is easily machined.

• Send for literature.



**BRASS COMPANY** Bridgeport  
Brass has always been a modern metal!

## Quality Control

(Continued from page 24)

Std. 105-B can be applied to civilian quality control as well. For a given AQL this plan provides lot size, sampling size, acceptance-rejection boundaries, and visual operating characteristic curve for each sampling category.

The main advantage of knowing your operating characteristic (OC) curve is that it graphically states the producer's and consumer's risks. The OC curve gives the relationship between the quality of the lots submitted and the probability of passing those lots. For every sampling plan the vendor takes the risk that good lots will be rejected and the P.A. takes the risk that bad lots will be accepted.

In the simplified comparison of inspection plans illustrated on page 24, the 100% sampling curve (actually a straight line) set up to inspect material with two lots defective per 100 received shows that neither the vendor nor the P.A. takes risks. Ideally, this arrangement would be a good deal for both sides. But 100% inspection runs up costs.

Compromising between perfect quality control and costs, the 10% sampling plan (for illustration purposes only) in effect shares the risks between vendor and P.A. Purchasing's risk, as shown, is the chance of accepting nine defective lots per 100 with an AQL of two defects per 100. Not indicated in the example is the vendor's risk, which in this case would be the chance of the inspector rejecting five good lots per 100 submitted. The risks vary with the particular sampling plan chosen. And the particular sampling plan depends on the number of lots purchased and quality limits placed upon them.

For a complete rundown on how to choose a sampling plan, best bet is to get Military Standard 105-B, called Sampling Procedures and Tables for Inspection by Attributes for 40¢ from the U. S. Government Printing Office, Washington 25, D. C.



## The Case of the Surplus Switches

# HOW WOULD YOU SOLVE IT?

### The American Arbitration Assn. Helped Settle Dispute Over a Conversation vs. a Contract

Some financial loss may result when a purchasing agent errs, or when his company's policies change, making a purchase previously contracted for no longer necessary. But one company recently found the loss greater than expected.

Early last year a manufacturer of lamps and lighting equipment contracted with an electrical supply company for a quantity of switches and sockets, all standard items in the latter's catalog. Shortly before delivery was to take place, however, the lamp manufacturer decided to divert his efforts into another field.

As he would no longer need the switches and sockets, the purchasing agent who negotiated the deal arranged a conference with the seller to see what might be done.

"I admit the contract is binding on us," he said. "But these are standard items, not manufactured to our special order. We'd appreciate it if you sold them elsewhere and credited our account. If it turns out that you have to take a slight loss, we'd be willing to make good."

The seller was sympathetic but didn't promise anything definite. All he really said was that he'd see what he could do. Still, the purchasing agent was hopeful that he wouldn't have to accept merchandise he didn't need. Surely, he thought, the electrical supply company would find other customers for standard

items listed in a catalog.

He was surprised, therefore, when a shipment arrived with an invoice in accordance with the original contract. "What happened to your promise to relieve us of the burden?" he asked.

The vendor answered: "If we sold the switches you ordered to our regular customers, it would just be another way of letting you get out of the contract scot-free. We didn't promise to do that."

Finally, the dispute went to a board of three arbitrators, selected from panels of the American Arbitration Association. This was in accordance with the arbitration clause in the original sales contract.

#### What's Your Answer?

If you sat as a member of the arbitration panel on this case, how would you adjudicate the issues?

Make your own decision. Then turn to page 37 and learn how the expert arbitrators solved the case.



Hoover, America's leading producer of balls, announces the availability of five important types of metal balls to serve the requirements of highly specialized applications. Advanced manufacturing techniques and rigid quality control methods are employed to meet Hoover Quality standards, the highest in the industry.

In addition to the special balls presented here, Hoover produces balls in chrome steel, carbon steel, stainless steel, brass, bronze, monel and other materials in a wide range of standard sizes and grades. Two complete Hoover ball manufacturing plants provide ample capacity to handle even the largest orders. For complete information, mail the coupon.

● **PLATED BALLS** for ornamentation, identification, chemical resistance and many other uses. Available with copper nickel plate, copper flashed, chrome flashed, chrome plate and black oxide surfaces.

● **DRILLED BALLS** used in universal joints, water faucets, valves, ornamentation and other applications. Hole size and tolerances are dependent upon the material.

● **POWDERED METAL BALLS** made from various materials fill requirements for modified ball shapes at minimum cost. These balls are finished to customer specifications.

● **SEMI FINISHED BALLS** of hardened chrome steel or non-hardened low-carbon steel for low cost applications. They offer sound metallurgical properties for applications requiring loose tolerances at low running speeds.

● **HIGH PERFORMANCE BALLS** made from vacuum melted 52100 bearing steels; tool steels of M-2, M-10 and M-50; stainless steels of 316, 329 and 410. For elevated temperature, fatigue resistance and corrosion resistance.

**Hoover**  
BALL DIVISION  
P. O. Box 381, Middletown, Ohio  
hoover ball and bearing company

Hoover Ball Division  
Hoover Ball and Bearing Company,  
Box 381, Middletown, Ohio  
Please send information on Hoover Quality Balls

PW-5

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

### AmForge Automating Output of Track Links For Crawler Tractors

**Chicago** — AmForge Div. of American Brake Shoe Co. has developed an automated hot forging facility that points the way to substantial savings for crawler tractor manufacturers. AmForge estimates quantity production runs will save 10% to 20% in cost compared with hammer forged links.

The AmForge method starts with carbon steel billets of 5 to 10 lb., heats them, and forges them into links with a four-stage progressive die press. Links produced by the automated line are free of mill scale, and do not need shot blasting. The company claims it can produce 1,200 links/hr. at top speed, compared with 300/hr. made by conventional hammer presses.

Savings made possible by the automated facility may enable crawler tractor manufacturers to recapture much of the replacement market which was lost to small distributors and forging shops. One source estimated that 90% of all track links may go to replacement, and only 10% go to new equipment production.

AmForge's initial contract is with Caterpillar for 40,000 links per month; the average crawler tractor uses 200 links.

AmForge said its new \$750,000 line can also produce other high-volume items such as conveyor belt links, automotive gears, and high pressure valves at less cost than present methods.

## New Steel Developed by Bethlehem Said to Reduce Enameling Expense

**Bethlehem, Pa.** — Bethlehem Steel Co. put on the market a new steel which it said will cut porcelain enameling costs by 15% to 50%.

Besides reducing production costs for enamellers, the development opens the way for buyers of porcelain enameled end-products to cut costs by negotiating for part of the savings realized by their suppliers.

### Compares With Conventional

Bethlehem said the new steel, known as Bethnamel, compares with conventional enameling iron in cost. The Bethnamel comes in either sheet or plate form, but at present, a two-or three-week lead time must be given for delivery. Eventually, off-the-shelf stocks will be available, the company said.

Produced by an "open coil annealing process," the new steel has a carbon content of only .003%—one-tenth that of ordinary enameling iron—and needs only one coat of porcelain instead of two coats previously required.

In addition, Bethlehem said the new steel is relatively easy to work; has excellent sag re-

sistance and weldability, and won't flake, chip or wear out drills as rapidly as conventional enameling iron.

### Deep Drawing

A key feature of the new steel, the company said, is its deep drawing characteristics. Pans six inches deep have been drawn, then enameled. Sharp corners with chip-resistant enamel surfaces also have been formed with the new steel, said Bethlehem.

## Two Damage Suits Filed Against Electrical Firms

**Kansas City**—N. W. Electric Power Cooperative, Inc., filed two damage suits in U. S. District Court here seeking \$1,338,567 for alleged price fixing on heavy electrical equipment.

One suit asks treble damages of \$753,920 from General Electric Co., Westinghouse Electric Corp., Allis-Chalmers Mfg. Co., Federal Pacific Electric Co., and I-T-E Circuit Breaker Co. The complaint is for alleged overcharges on purchase of circuit breakers for \$500,000 since 1951.

The other suit, based on the purchase of power transformers valued in excess of \$400,000 since 1956, names General Electric, Westinghouse, Allis-Chalmers, McGraw-Edison Co., Moloney Electric Co., and Wagner Electric Corp.

The nonprofit co-op, which supplies electrical power to rural areas, is headquartered in Cameron, Mo.

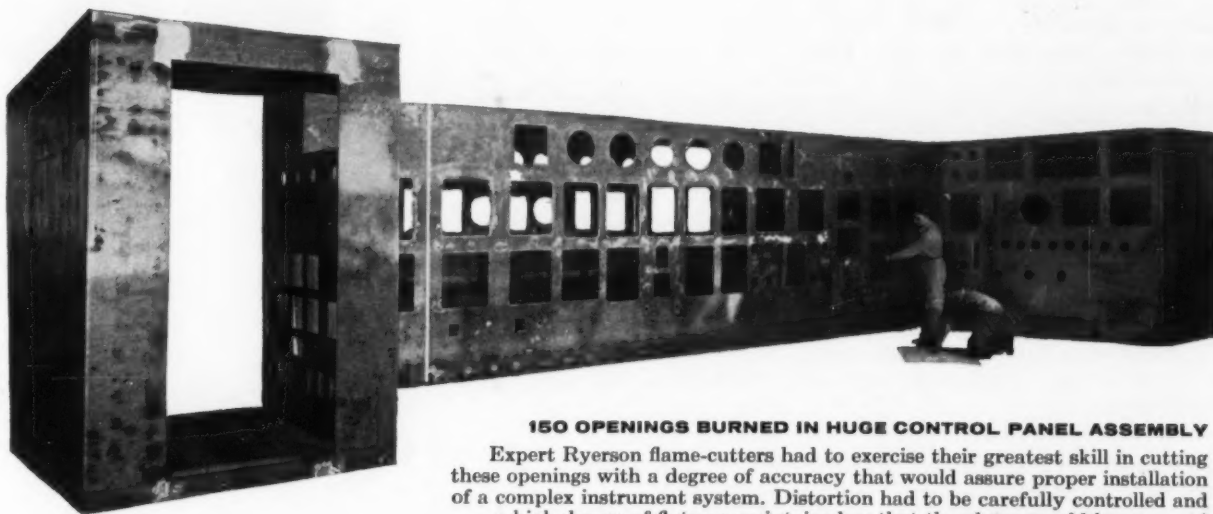
ning of fruits, vegetables, and seafood products. The new material was designed primarily for beer and motor oil, chiefly to combat the inroads of aluminum in these can fields it was reported by the company.

William F. May, vice president and Canco Div. general manager, made the disclosure at the opening of a new plant here. Another was opened in Astoria, Ore., the same day.

He also said the company is testing a new production technique for turning out can bodies at the rate of 1,500-2,000 per minute, against a present peak rate of 500-600 can bodies per minute.

## American Can Planning New Fields for Tin

**Eugene, Ore.** — American Can Co. is planning to adapt lightweight tinplate to the can-



150 OPENINGS BURNED IN HUGE CONTROL PANEL ASSEMBLY

Expert Ryerson flame-cutters had to exercise their greatest skill in cutting these openings with a degree of accuracy that would assure proper installation of a complex instrument system. Distortion had to be carefully controlled and a high degree of flatness maintained so that the plates would have a good appearance when painted. These exacting requirements were readily met by Ryerson.

## Clevite Doubles Capacity For High Purity Copper Used in Printed Circuits

**Cleveland**—Clevite Corp. is doubling its capacity for manufacturing the high-purity copper used widely in the electronics industry for printed circuits.

The expanded facilities at the company's McConnelville, Ohio, plant are scheduled for completion in October. W. D. Cameron, general manager of the firm's Cleveland Graphite Div., said the plant has been operating at full capacity since Clevite began producing the lead-free foil in commercial quantities last fall.

He said the greatest demand has been for foil .0014 in. and .0028 in. thick. The foil, which is produced in a continuous strip 78-in. wide, is available in all standard thicknesses and is compatible with all commercially used adhesive systems, Cameron said.

## DuPont Starts Production Of Columbium Products

**Wilmington, Del.** — DuPont Co. has begun producing mill products of columbium and its alloys in commercial quantities at a new metals center in Baltimore.

The products, which include sheet, strip, bars, plate, tubes and other shapes, average about \$60/lb. in price. Columbium is used in rockets, jet engines, nuclear reactors, and other "space age" machines, where high strength at elevated temperatures is required.

The new metals center, which is an outgrowth of DuPont's research work in the refractory metal field, is designed so that tantalum, tungsten, and molybdenum can be produced there in the future.

# How METALOGICS\* cools off the high-cost hot seat!

Here are two examples of how Ryerson Metalogics helps hundreds of companies save money, improve their products and cut costs.

Metalogics-trained Ryerson specialists help you value-analyze high-cost production problems—and give you unbiased recommendations on exactly the right steel, aluminum or plastic, plus the best methods of fabrication, to do the job.

Little wonder, then, that more and more companies across the country find the high-cost hot seat a little cooler after inviting a Ryerson man to value-analyze specific problems and come up with recommendations. Is your company taking full advantage of this unique service?

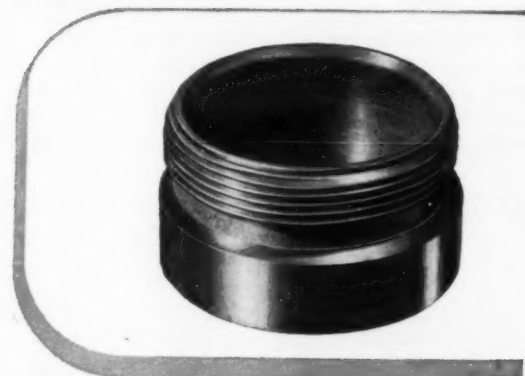
\*Metalogics—the Ryerson science of giving optimum value for every purchasing dollar.

# RYERSON

JOSEPH T. RYERSON & SON, INC., MEMBER OF THE INLAND STEEL FAMILY

METALOGICS

STEEL • ALUMINUM • PLASTICS • METALWORKING MACHINERY



SUGGESTION ELIMINATES THREAD GALLING

Manufacturer made this special coupling of aluminum to gain the advantages of light weight, corrosion resistance and easy machining. But galling of threads presented a problem.

Following the recommendation of a Ryerson Metalogics specialist, the company hard-coated the parts by special low-temperature anodizing, which produced a surface hardness of Rockwell 70 C. Galling was eliminated, and corrosion resistance increased. One more example of cost-cutting technical help from Ryerson.



Current

# Research & Development

**TIRES** of the future may be blowout and puncture-proof. And even the periodic trip to the service station to check air pressure may become as obsolete as the hand crank for starting the engine. Scientists in the new Application Research Lab at the National Aniline Div. of Allied Chemical are researching a foam-filled tire which would get its cushioning properties from a plastic foam instead of from the traditional air. Tires of this type are already being used for some heavy-duty off-the-road equipment.

**FUEL CELLS** teamed with electric motors offer far greater potential than any conventional power plant to meet future performance requirements for ground military vehicles, according to a recently concluded Army study. The research project found over a dozen potential advantages in using a fuel cell to generate electricity, which would then in turn power electric motors to propel the vehicle. The possible advantages include: new flexibility and freedom in vehicle design, utilization of a variety of fuels at high efficiencies, less field maintenance than conventional power plants, more tactical freedom because of lower noise level, lower operating temperature, and improved vehicle silhouette.

**ULTRASONIC CLEANER** size has been cut 75% and weight by more than 50% in a new model scheduled for debut next month. The completely new design developed by Westinghouse has no tuning knob or meter—the operator has only to turn the unit on and it is ready for use. The first production model will be rated at 1 kw, with a 2½ kw solid-state model scheduled for introduction later this year. The size and weight reduction was brought about by integration of the solid-state transistor controlled rectifier in a specially developed circuit.

**TRANSMISSION OF DATA OVER LIGHT WAVES** is a big step closer to commercialization, thanks to a continuously operating gaseous optical maser developed by Bell Labs. Coherent light can be used to carry information in a manner similar to radio waves, but its handling capacity is millions of times greater. Bell's development offers much more potential than solid-state masers (Hughes Aircraft and IBM) which rely on an external bright light to pump chromium atoms in the ruby crystal structure to an excited energy level that emits coherent light. The crystal masers can only transmit pulsed light, while the gas maser transmits continuously. Bell's invention replaces the crystal with a mixture of helium and neon gases, through which an electrical discharge flows the same way it does in a conventional neon tube.

**ASBESTOS REINFORCED PLASTICS** should have excellent market potential, owing to their very high strength-to-weight ratio. Chrysotile fiber, being researched by American Smelting and Refining, has a strength which may run as high as 800,000 psi. The fiber is also extremely fine—surface area is 10 to 15 times as great as silk or cotton. Added advantages are flexibility, and resistance to heat, moisture and weathering.

**ADHESIVES** are proposed for a large number of automotive metal-joining jobs. Minnesota Mining & Mfg. engineers predict future cars may have plastic radiators that use adhesives to join the plastic to metal tubes. Adhesives now can hold 10,000 psi., resist water, salt, solvent and adhere to surfaces covered with a film of oil. Other proposed jobs: join trim, hinges, and structural members.

**ALUMINUM AND COPPER-BASE ALLOYS** are getting the full-scale research treatment at Olin Mathieson Chemical Corp. Projects include studies to: make aluminum stronger at higher temperatures, make brass stainless, create satin or shiny finishes, tailor-make alloys for specialized uses, develop an aluminum alloy that will not crack under great tensile load, and find a protective coating that never will corrode or lose its luster.

**ELECTRICITY** may be sent without wires if techniques under study at Raytheon bear fruit. The company is working on a system to use microwaves to beam power through the air in places where wires are not feasible. This interest in microwave power transmission has resulted from the development in the last two years of high power tubes (such as the amplatron) which are highly efficient and convert large amounts of d.c. energy to microwave energy. A device no larger than an automobile cylinder could produce over 1,000 kw of radio frequency power—about 10 times the hp. rating of the complete auto engine.

## P/W Looks at Office Equipment

as seen at the . . .



### Carbon Paper

Lasts Longer

Carbon paper with a film-base backing material and a plastic ink formula lasts two to three times as long as conventional quality sheets. It is packaged in pads of 100 sheets and takes one-third the storage space of boxed carbons. The liquid ink coating leaves permanent, smudge-proof copies.

**Price:** \$10/pad. **Delivery:** immediate (after June 1).

**Columbia Ribbon & Carbon Mfg. Co.,** Glen Cove, N. Y. (PW, 5/15/61)



### Sorting Rack

Speeds Mail Handling

Sorting rack for mailroom use has adjustable dividers and shelves to make any size openings. Modular design permits arrangement of racks to suit individual needs (semicircle shown is made up of three racks). Stands take floor space of 24 in. x 38½ in. and have a sloped work table.

**Price:** \$228/unit (when ordered complete). **Delivery:** 2 wk.

**Friden, Inc.,** San Leandro, Calif. (PW, 5/15/61)



### Accounting Machine

Operates at High Speeds

Electronic accounting machine figures a weekly payroll or prepares customers' bills in one-third the time previously required. The desk-size machine computes real estate taxes, mortgage interest, construction costs, and handles a wide variety of other accounting jobs requiring extensive calculations.

**Price:** \$18,750. **Delivery:** 90 days. **National Cash Register Co.,** Dayton 9, Ohio. (PW, 5/15/61)



### Adding Machine

Encodes Listing Tape

Portable adding machine has four-position switch on keyboard which can be set for total, subtotal, subtract, and non-add. Code numbers and dates may be printed without affecting calculations. The machine cycles at 150 strokes per min. and has single-, double-, and triple-zero keys for time-saving entries. It totals to 11 digits.

**Price:** \$115. **Delivery:** immediate. **Underwood Corp.,** One Park Ave., New York 16, N. Y. (PW, 5/15/61)

# New Products

Price data that accompany each product description are list or approximated prices supplied by manufacturers. Unless otherwise noted, prices quoted are for the smallest quantity that can be ordered.



## Overhead Projector

### Folds Into Carrying Case

Overhead projector for transparent films is portable and folds into a single, self-contained unit, making its own carrying case. The aperture on the projection stage is 10 in. x 10 in., as in a full-sized model. The projector has a 500-w. lamp, 14-in. focal length, and f3.5 lens. It weighs 30 lb. and opens to a 22-in. height.

**Price:** \$299. **Delivery:** immediate.  
Minnesota Mining & Mfg. Co., 900 Bush Ave., St. Paul 6, Minn. (PW, 5/15/61)

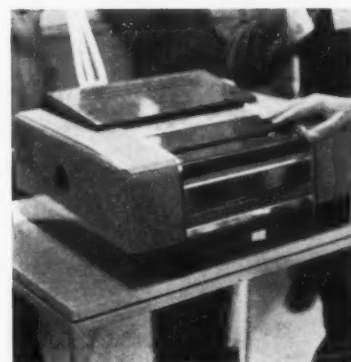


## Dictating Machine

### Records on Tape Magazine

Dictating/transcribing unit records on tape magazine and has a buzzer that automatically signals when the end is reached. A switch instantly changes over from dictating to telephone-call recording, and a two-digit counter readily locates specific tape sections.

**Price:** \$189.50. **Delivery:** immediate.  
North American Philips Co., Inc., 230 Duffy Ave., Hicksville, N. Y. (PW, 5/15/61)

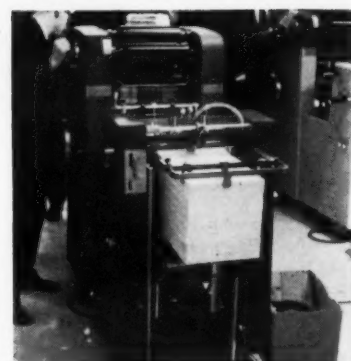


## Photocopy Machine

### Copies on Any Paper

Desk-top photocopy machine produces black and white copies of any legible material, including ball-point and colored writing. Electrostatic copies are made on any type of paper without the use of lenses, at an average cost of 4¢ each.

**Price:** \$650 (semi-automatic) and \$750. **Delivery:** 30 to 60 days (after Oct. 1).  
Savin Business Machines Corp., 161 Sixth Ave., New York 13, N. Y. (PW, 5/15/61)



## Offset Printing Press

### Blends With Office Decor

Small offset printing press for high-speed operation comes in a choice of four colors to match office decor. It prints a wide range of paper stocks in sizes up to 11 in. x 17 in. from metal plates or paper masters. Simple controls permit fast changeover from one job to another.

**Price:** \$3,485 (basic) to \$3,940 (with accessories). **Delivery:** immediate.  
Davidson Corp., 29 Ryerson St., Brooklyn, N. Y. (PW, 5/15/61)



## Photocopy Machine

### Operates Automatically

Machine turns itself on when an original is fed into it, makes exposure, adjusts copy paper to the length of the original, trims the positive, delivers the developed print, and shuts itself off. It copies, by diffusion transfer, any kind of original up to 11 in. wide and 150 ft. long, and operates on a standard 115-v. a.c. line.

**Price:** \$628. **Delivery:** 2 wk.  
General Aniline & Film Corp., Ozalid Div., Johnson City, N. Y. (PW, 5/15/61)

## This Week's

# Product Perspective

MAY 15-21

**GROWING OFFICE EQUIPMENT** market is attracting competition that should mean improved products and lower costs. The lure of increased office mechanization (intensified by rising clerical costs) has brought established companies into new fields—IBM into dictating equipment and Farrington Mfg. Co. into addressing machines, for example.

**Hottest competitor of all is Olivetti.** Now teamed up with the Underwood name, the company is offering what it calls "the most complete line of office equipment in the business." Underwood-Olivetti is now hiring 3,000 salesmen in this country and preparing a full-scale marketing campaign.

• Here's a roundup of the latest trends in the fast-changing office equipment field:

**TYPEWRITERS:** Electrics continue to set the pace in the industry as more and more office managers make the complete switch to electric typewriters. New entries in the electric typewriter field (altogether, there are more than half-a-dozen now) are pressuring the sales leader, IBM. Intensified competition may well mean reduced prices when IBM brings out a new line now under development. Even at current levels, the price differential between manuals and electrics only runs about \$150 to \$200 a machine for standard office models.

**COPYING MACHINES:** Electrostatic machines are still being touted as the best answer for all-purpose dry copying. Newest entry, scheduled for early fall debut, is by Savin Business Machine Co. Priced at \$650, it is the lowest priced electrostatic to appear that can use any paper. Makers of other type copying machines continue to automate their wares. New diffusion process machine by Ozalid, for example, makes a copy with a single pass of the original through the machine.

**CALCULATING MACHINES:** Makers are pushing variety of low-priced semi-automatic machines for run-of-the-mill office jobs. The manufacturers claim that surveys show the average desk calculator is used only minutes a day. So why pay for speed you don't need? they ask. **First electronic desk calculator that replaces gears and cams with transistors and diodes** will be introduced in the fall by an electronics firm, Electrosolids Corp. Underwood-Olivetti is reported to have a similar design in the lab.

**FURNITURE:** Versatility is the byword. Units are being designed with modular construction that can be tailored to fit a wide variety of situations. Color is also coming in for attention, and much equipment is available in a variety of bright hues. Remington Rand has brought out a new line of prestige furniture based on the designs developed last fall for U. S. Steel by Peter Muller-Monk Associates. Design was part of Big Steel's campaign to combine "beauty of wood with strength of steel."

**DICTATING MACHINES:** Central-station machines (systems that let the dictator give his message over his regular phone or auxiliary handset) are getting a big play. They are said to be especially valuable for the executive who needs a machine for only a few minutes each hour.

**No single recording medium is leading the field.** Magnetic equipment manufacturers are stressing the economy features of the reusable magnetic belts and tape; while stylus machine makers are playing up the idea that ability to "see" the sound makes life easier for the boss and his secretary.

**TELEPHONE ATTACHMENTS:** The phone companies are concentrating on making the user's life easier. Two new attachments to dial phone numbers have just been introduced for late fall delivery.

**"Rapidial,"** the more sophisticated of the two new phone devices, was designed by McGraw Edison and will be marketed throughout the Bell System. The device uses a magnetic tape to store up to 290, fourteen-digit phone numbers. The user turns the dial on the phone unit until the name of the person he wishes to contact appears. He then pushes a single button, and the phone takes over the dialing function. Names and numbers can be changed in seconds by merely dialing the new number into the magnetic storage. **The unit will rent for \$13 to \$15 a month.**

**"Card Dialer,"** the other new phone unit, is a development of Bell Labs and will be manufactured by Western Electric. **The integrated unit combines both the telephone and dialing equipment in a single handset.** The card dialer has a storage space in its housing for about 40 small plastic cards, but additional cards can be filed separately. The user punches out holes in each card to correspond to the number he wishes to have on file. When a number is to be called, the appropriate card is pushed into the dial, the phone receiver lifted, and the dial bar pushed. The unit automatically reads the card and dials the number. **The monthly rate for the unit is estimated at \$3 to \$4.**



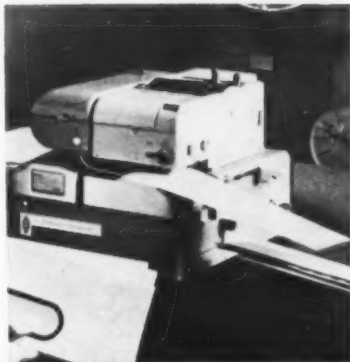
## P/W Goes to the Office Show

### Postage Meter

#### Seals and Stacks Mail

Electric postage-meter machine seals, stamps, and stacks letters in one operation; or issues gummed stamps for packages and bulky envelopes. The meter will print up to \$9.99½ in a single stamp. A detachable envelope feeder, available as an accessory, converts the unit to a fully automatic machine.

**Price:** \$565. **Delivery:** immediate.  
**Pitney-Bowes, Inc., Stamford, Conn.**  
(PW, 5/15/61)

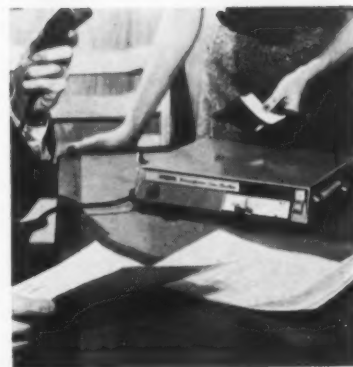


### Dictating Machine

#### Records on Plastic Belt

Dictating machine records on plastic belt which holds up to 15-min transcriptions. The 10½-lb. portable machine has a power-control microphone with touch-button control for automatic operation. The disposable recording belts cost 4¢ each.

**Price:** \$385 (360 for transcriber).  
**Delivery:** immediate.  
**Dictaphone Corp., 711 Third Ave., New York 17, N. Y.** (PW, 5/15/61)



### Photocopy Machine

#### Prepares Masters

Machine—using special paper—makes spirit masters from original copies, and offset masters from copies on the special paper.

The unit can produce single copies on lightweight, white paper for less than 4¢ each. It also can be used to laminate papers in plastic in 15 sec.

**Price:** \$995. **Delivery:** immediate to 2 wk.

**Ditto, 6800 McCormick Rd., Chicago 45, Ill.** (PW, 5/15/61)



### Dictating Machine

#### Records on Tape

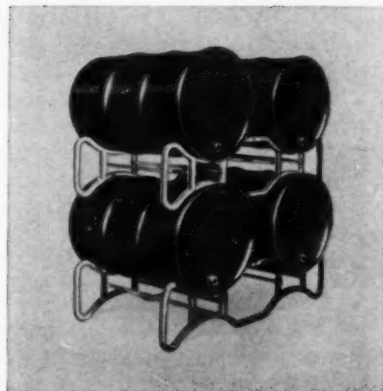
Dictating transcribing unit gives up to 45 min. of continuous operation on magnetic tape reels or magazines. It runs on drycell batteries and also can operate directly from 110-v. current. The 6-lb. machine is completely pushbutton operated and has an automatic recording-level control.

**Price:** \$149.50. **Delivery:** immediate.

**DeJur-Amsco Corp., 45-01 Northern Blvd., Long Island City 1, N. Y.** (PW, 5/15/61)



Apex worked closely with Republic, and Thornel and Associates in determining the best box design for their job. The Republic Drop Bottom Boxes are 54" wide, 62" long, and 45" deep. Made of highest quality steel, with reinforced corrugated design for rugged, long-life service.



**NEWEST IDEA** for storing drums—strong, low-cost Republic Portable Drum Racks. Of all-steel channel construction, the racks assemble quickly and save valuable floor space. Available for immediate delivery. Mail the attached coupon for more information.



**MEASURE, CUT, ASSEMBLE.** That quick, with Republic METAL LUMBER® you have stronger, safer framing for any application where common building materials are now being used. Comes in two gages, two widths, standard bundles of 10- or 12-foot lengths. Send coupon.



**CONTRACT MANUFACTURING SPECIALISTS.** From design through engineering and fabrication, rely on Republic for contract production of sheet metal products. Wide range of facilities means that Republic can handle your complete job (or any phase of it) . . . often at considerable savings. Send for information.



### Laminator

#### Works With Heated Rollers

Laminator's heated rollers apply heat and pressure simultaneously at the exact points where laminating occurs. It laminates at about 6 fpm. and accommodates materials up to 8½ in. wide and ⅜ in. thick. Machine holds 500 ft. of film and has thermostatically controlled motor circuit to prevent running film when unit is not properly heated.

**Price:** \$295. **Delivery:** 3 wk.

**General Binding Corp., Northbrook, Ill.**  
(PW, 5/15/61)



### Check Processing Machine

#### Handles All Needs

Check-processing machine protects, signs, dates, counts, secures, adds, and lists items at speeds of up to 3,000/hr. Checks are delivered into a locked vault and totals or sub-totals may be taken at any time. A "total" lock prevents unauthorized persons from clearing the machine.

**Price:** \$2,865. **Delivery:** immediate.

**Burroughs Corp., Todd Co. Div., 1150 University Ave., Rochester, N. Y.** (PW, 5/15/61)

*Apex mechanizes material handling with Republic Drop Bottom Boxes...*

## OPERATING ECONOMIES TO PAY FOR NEW EQUIPMENT WITHIN 2½ YEARS

From scrap receiving to melting furnaces, Apex Smelting Company, Chicago, has mechanized and streamlined operations with 900 new Republic Drop Bottom Steel Boxes. Here is modern containerization in action—eliminating manual handling; stopping scrap material loss; facilitating an accurate records system; and *saving dollars every step of the way.*

According to Mr. P. R. Janney, Apex project engineer, operating economies resulting from the use of Republic Drop Bottom Boxes will pay for the new equipment over a short, easily amortized period of from 2 to 2½ years.

Apex buys scrap metals, which are sorted, prepared, stored, and finally melted down and poured into pigs of specification aluminum alloy for resale. Formerly scrap was transported

to the sorting equipment in a variety of temporary containers—drums, wood cartons, burlap bags. After sorting, it was stored in bins, then hand and power shoveled into containers to go to the melters.

Now scrap is mechanically loaded into Republic Drop Bottom Boxes at the receiving dock, carried to the sorter by fork trucks, sorted, prepared, and reloaded into the same boxes. Card pockets on each box speed identification of its contents for charging into melters.

**WHATEVER YOUR MATERIAL HANDLING OR CONTAINERIZATION PROBLEM,** Republic's Material Handling Engineers can help you solve it. Republic equipment is engineered and built to your specific job requirements. Send the coupon for more information.



## REPUBLIC STEEL

*Republic Has The Feel For Modern Steel*



Strong, Modern, Dependable

### REPUBLIC STEEL CORPORATION

DEPT. PG-1962

1441 REPUBLIC BUILDING • CLEVELAND 1, OHIO

Please send more information on the following:

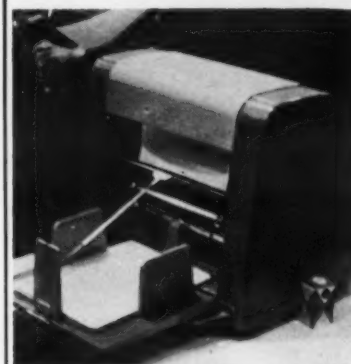
- ☐ Republic Material Handling Units    ☐ Contract Facilities  
☐ METAL LUMBER®    ☐ Drum Racks

Name \_\_\_\_\_ Title \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_



### Duplicating Machine

#### Collates While Printing

Duplicating machine's inter-leaver saves collating time by collating a second sheet being printed with a previously printed sheet. It also can be used for slip-sheeting. The unit's paper-feed tray is adjustable to sizes from 9 in. x 15 in. down to 3-in. x 5-in. index cards.

**Price:** \$465 (manual) to \$705 (electric and fully automatic).  
**Delivery:** immediate.

**Rex-Rotary Distributing Corp., 387 Park Ave. S., New York 16, N. Y.** (PW, 5/15/61)



### Prestige Furniture

#### Uses Wood and Metal

Desks of prestige furniture line have metal pedestals and five-ply tops with walnut veneer finish. They include double pedestal, single pedestal, executive, and secretarial "L" models. Auxiliary tables and sliding door credenza units with drawers fill out the line.

**Price:** \$350 to \$700 (desk).  
**Delivery:** immediate (after June 1).

**Remington Band Systems, 122 E. 42nd St., New York 17, N. Y.** (PW, 5/15/61)





### Photocopy Machine

#### Copies Two Originals Together

Copier reproduces two 8½ in. x 11 in. letters at the same time. The copy-paper tray handles letter, legal, and 11-in. x 17-in. paper and adjusts to size with a single lever movement. Over-all size is 24 in. wide, 23 in. deep, and 14 in. high.

**Price:** \$485. **Delivery:** immediate to 2 wk. (after June 1).

**Eastman Kodak Co., Business Photo Methods Sales Div., Rochester 4, N. Y. (PW, 5/15/61)**



### Collator

#### Makes 70 Sets per Minute

All-electric collator, with eight stations, produces up to 70 sets per minute. The receiver tray is adjustable to accommodate different stock weights, and increased clearance space in the receiving tray better accommodates punched or perforated stock. The fully, automatic machine is equipped with a manual shut-off in the rear.

**Price:** \$1,895. **Delivery:** immediate.

**Halverson Products Co., Inc., 1051 N. Paulina St., Chicago 22, Ill. (PW, 5/15/61)**

# HEX SCREWS THIS BIG...

◀ ACTUAL SIZE

*are produced by*

That's a 2"x10" hex screw, shown actual size. Like virtually every other size of hex screw and nut, it's available from stock at RB&W plants and warehouses. In this giant size range, hex screws come in fine and coarse thread, conform to SAE grade 2 and heat-treated grade 5 fasteners.

RB&W is one of the very few sources of supply that carries such large sizes as standard, and that produces them to the same high quality requirements established for all items in the complete fastener line.

When you need a giant—be sure to call on RB&W. Russell, Burdick & Ward Bolt and Nut Co., Port Chester, N. Y.



Plants at: Port Chester, N.Y.; Coraopolis, Pa.; Rock Falls, Ill.; Los Angeles, Calif. Sales office and warehouse at: San Francisco, Calif. Sales offices at: Ardmore (Phila.), Pa.; Pittsburgh; Detroit; Chicago; Dallas. Sales agents at: Cleveland; Milwaukee; New Orleans; Denver; Fargo.



### Printer

#### Accommodates Large Forms

Fully automatic machine prints addresses or other data from embossed metal plates. It accommodates large forms and has a large-capacity plate magazine with plugboard selection to enable it to select desired groups. Before printing, plates are visible in two positions for the operator's complete control.

**Price:** \$1,000. **Delivery:** immediate to 4 wk.

**Farrington Business Machines Corp., Needham Heights 94, Mass. (PW, 5/15/61)**



### Executive Desk

#### Has Plastic Top

Office furniture for executive use is a modular desk arrangement with maximum top-surface area. The "L" unit has a large filing capacity. The top surface is a plastic laminate with a wood grain finish, designed with an overhang. The grouping is available with an optional H-frame side support.

**Price:** \$730. **Delivery:** 2 to 3 wk.

**Alma Desk Co., High Point, N. C. (PW, 5/15/61)**

## Copying Machine

**Runs 3,000 Copies an Hour**

High-speed, electric copying machine runs off more than 3,000 letter-size copies an hour. A 17-in. wide roll of sensitized paper, slit down the middle, produces two identical copies from duplicate originals. The unit prints, cuts, and stacks copies in a continuous operation. For larger copies, it can be set to produce 11-in. x 17-in. sheets.

**Price:** \$9,750. **Delivery:** 90 days.

**Charles Bruning Co., Inc., Mt. Prospect, Ill. (PW, 5/15/61)**



## Dictating Machine

**Is Self-Contained Unit**

Portable machine is a self-contained unit holding microphone, battery, charger, and charge indicator within a sturdy metal case. The unit records on a permanently reusable magnetic belt operating off a nickel-cadmium battery.

**Price:** \$249.50. **Delivery:** immediate (after June 15).

**Stenocord of America, Inc., 37-20 48th Ave., Long Island City 1, N. Y. (PW, 5/15/61)**



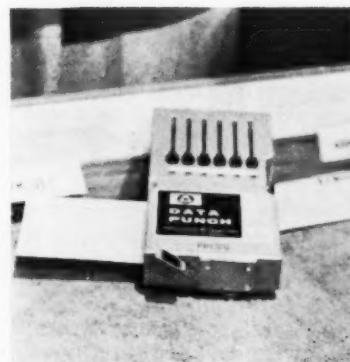
## Intercom System

**Permits Use Between Stations**

Intercom system of pushbutton telephones permits contact between any phone and all others. Two- to seven-phone systems are available and can be added to until the maximum number is reached. The 2½-lb. phones have a foam rubber base and easily convert from desk to wall units.

**Price:** \$58 to \$228. **Delivery:** immediate.

**Tele-Norm Corp., 55 W. 42nd St., New York 36, N. Y. (PW, 5/15/61)**



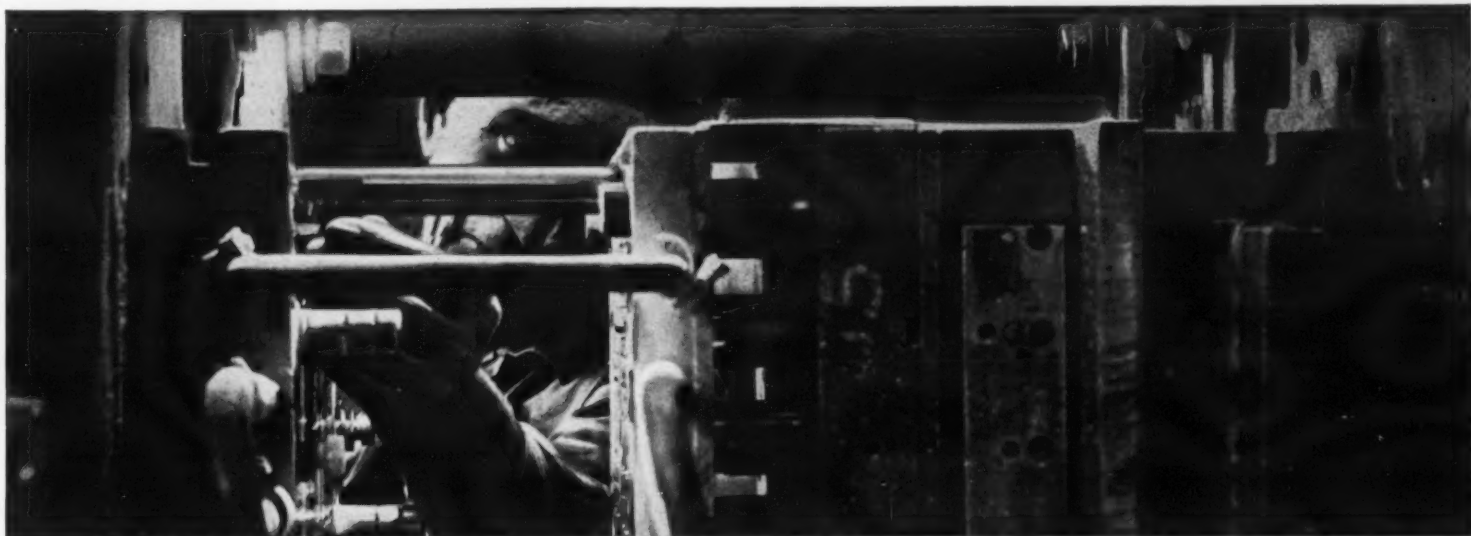
## Data Recorder

**Operates in the Field**

Punch machine records data at its source, punching holes into 80- or 51-column cards, or multi-part card sets. A card inserted in the machine is punched by a lever movement after data has been entered by positioning a series of keys. The card can then be fed directly into EDP equipment.

**Price:** \$150 to \$250. **Delivery:** immediate.

**Addressograph - Multigraph Corp., 1200 Babbitt Rd., Cleveland 17, Ohio. (PW, 5/15/61)**



Shell Tellus Oils are refined and formulated to meet exacting hydraulic service requirements, such as in this forming machine.

PHOTO COURTESY ATLANTIC PLASTICS INC., STAMFORD, CONNECTICUT

# BULLETIN:

## Shell provides a quick 6-point check list for hydraulic oils: Use it to pick the right oil for your needs

Selecting the proper hydraulic fluid for your equipment can be one of your most important decisions. And it can pay off in many ways. Less down time. Lower cost per unit. Longer equipment life.

Here are six bench marks to help you pick the best hydraulic oil for your plant requirements.

**1. Does it have good oxidation stability?** Oxidized hydraulic oil can form gums, lacquers and other deposits which may foul moving parts. Shell Tellus Oils are carefully refined to remove unstable, sludge-forming components, then fortified with a Shell-developed oxidation inhibitor.

**2. Will it resist foaming and emulsification?** Pump chatter and erratic operation are often the result of pump cavitation, brought on by oil foaming. Tellus® Oils contain powerful additives to help prevent foaming.

They also contain a selected inhibitor to combat effects of moisture that might be in the system.

**3. Does it fight rust and corrosion?** It is difficult to exclude all moisture

from a hydraulic system. And moisture can form troublesome rust. Shell Tellus Oils have been carefully compounded to resist corrosion.

**4. What are its lubrication qualities in continuous service?** Shell Tellus Oils form a clinging, oily film on mating metal surfaces. This maintains a constant guard against wear.

**5. How does it react to temperature changes?** This is a key factor in the performance of hydraulic equipment. Careful selection of the proper viscosity grade of Tellus assures satisfactory operation of your system over its entire temperature range.

**6. Is it available in several viscosity grades?** Shell Tellus Oils are available in a broad range of viscosity grades.

There's a special grade for virtually every hydraulic requirement.

Ask your Shell Industrial Products Representative for facts on Tellus Oils. Or write: Shell Oil Co., 50 West 50th St., New York 20, N. Y.

### A message to manufacturers of hydraulic equipment

There is a Shell Tellus Oil suited for your equipment.

**1.** Your customers can get Tellus Oils at Shell depots everywhere. Readily available throughout the world.

**2.** Quality is consistently high. Tellus always delivers top performance.



**A BULLETIN FROM SHELL**  
—where 1,997 scientists are working to provide better products for industry



## Paktronic Corp. Ready to Market New Machine for Packaging Goods

Cincinnati—Paktronic Machine Corp. is ready to make first delivery of its new machine for packaging goods in an air-tight, leak-proof paperboard container. The first application will be for ice cream, but possible jobs include frozen foods, oils, staple and dry items, detergents, and liquids.

The machine, called Paktronic, electronically seals the "paq" containers which are coated with aluminum foil on the

outside to serve as a conductor of cold and a moisture shield to prevent dehydration. An inner lining is plastic.

Don B. Kauffeld, company president, has also designed a flat-top, double-bottom milk carton with a hidden pouring spout that folds out from the inside.

Kauffeld claims that his cartons, which eliminate many flaps, will slice packaging costs for dairies from 25% to 50%, depending on volume.



RUBBER DEFLASHER has just discharged cleaned parts on the conveyor belt, while the operator prepares the next batch of parts for charge.

## New Device Uses Metallic Blasting To Deflash Parts

Mishawaka, Ind.—Wheelabrator Corp. is producing a machine which uses a metallic blast technique to deflash molded rubber parts. The system eliminates hand buffing, tearing, cutting with knife or scissors, and other manual operations.

The machinery at present may be used to deflash parts with a flash thickness of .005 in. or less and a part-wall thickness of .015 in. or thicker. It is effective on products molded from common organic compounds and some silicones. The company is researching to achieve an adequate flashing technique also for the low-durometer high-tensile strength compounds, certain silicones, and "loaded" compounds such as those which are high in graphite content.

Molded rubber parts are introduced into a 2-cu.-ft. work chamber which is enclosed in an insulated cabinet. Within the chamber, parts are sprayed with CO<sub>2</sub> to freeze the flash. It does not freeze the parts themselves. Media particles are then hurled into the chamber by centrifugal force, fracturing, and removing the flash without damage to the frozen parts.

The single unit machine includes the deflashing equipment and a dust collector which removes finely broken flash particles and any media fragments. The enclosure has a walk-in door and ample clearance within the cabinet for maintenance work.

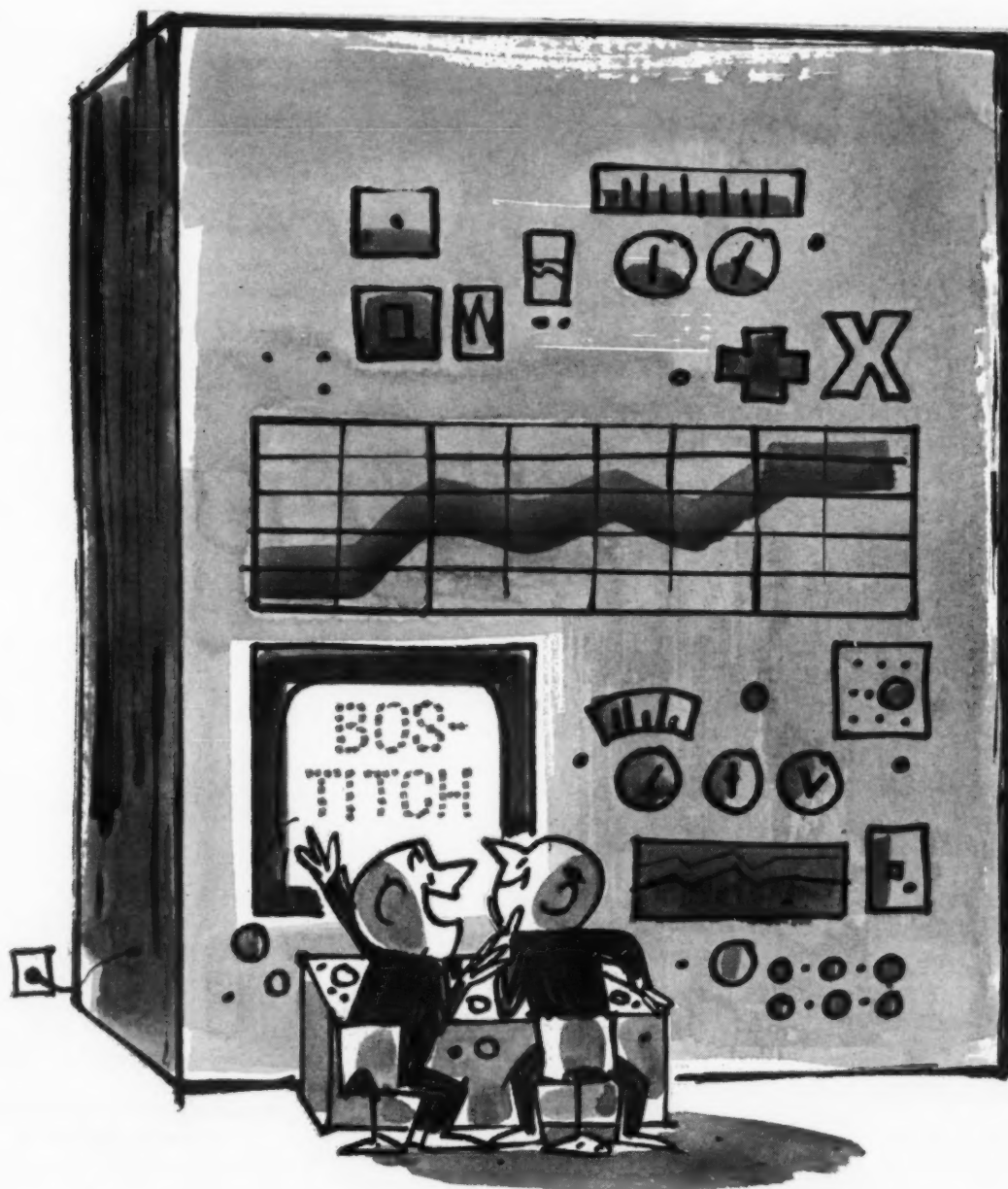
The wheelabrator mechanical deflasher generally processes ten 2-cu. ft. loads per hour with gas consumption varying from 2 lb./load to 15 lb./load depending on dimensions of the flash and the parts. Media costs average less than 1¢/load. The machine itself is tailored for specific job requirements but costs approximately \$32,500. Delivery time is 12 to 14 wk.

## Gamma Ray Inspection Detects Minute Flaws In Steel 4 Inches Thick

Chicago—Rauland Corp. has developed a gamma ray inspection system that detects minute flaws in 4-in. thick steel and projects the flaw images on a TV screen. The rays are produced by a dime-sized piece of Cobalt 60 and used with an Orthicon camera developed by the Picker X-Ray Corp.

The system permit assembly-line inspection of materials which heretofore required gamma ray photographs or destructive testing. In rolling mills, for instance, an operator can watch on a TV screen in a control room as slabs of steel move along a conveyor. He can determine the exact location of each defect and sheer off only as much steel as is necessary to remove the flaw. One mill has estimated that if the system saves only one inch of good steel from each slab, the annual savings possible with the system can be almost \$700,000.

Other possible applications include inspection of solid fuel rockets, nuclear rockets, and general inspections of castings and other metal objects too dense for X-ray study.



No matter what fastening problem we feed into it, it keeps saying that Bostitch saves money in the shipping department.

Call your Bostitch Economy Man. He's listed in the Yellow Pages.

Fasten it better and faster with

**BOSTITCH**  
STAPLERS AND STAPLES

105 BRIGGS DRIVE, EAST GREENWICH, RHODE ISLAND



## which drill really costs less?

Based on results, drills "A" and "B" (center and right, above) should cost 43% and 39% less than W & B drills (left, above)—instead, they can be purchased at *only* about 20% less.

Watch those *initial* costs—they may be costly!

### COMPARATIVE DRILLING PERFORMANCE

General Purpose Jobbers Drills	*No. of holes per drill size					Total No. of Holes	Efficiency Rating
	#40	#30	3/16"	1/4"	5/16"		
W & B Drills	208	62	57	50	34	411	100%
"A" Drills	142	24	14	28	28	236	57%
"B" Drills	114	49	13	61	15	252	61%
Thickness of plate	1/2"	3/4"	1/2"	1"	1"	Material: Heat treated chrome nickel steel	

\*In each drill size, five drills of each brand were tested and each drill was resharpened three times as required.



PARTNERS IN PRODUCTION PROGRESS

Many drill performance tests similar to this one have been made. However, W & B will gladly conduct drill tests at *your* plant and under *your* conditions. Contact us direct or through your W & B distributor. He can offer this service plus fast delivery from complete stocks.

# WHITMAN & BARNES

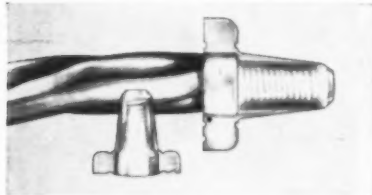
40000 PLYMOUTH ROAD • PLYMOUTH, MICHIGAN

DRILLS • REAMERS • END MILLS • COUNTERBORES • COUNTERSINKS • CARBIDE TOOLS • SPECIAL TOOLS



# Always In Stock

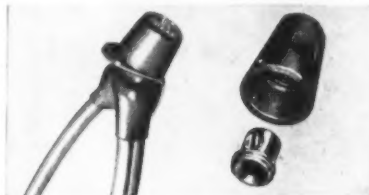
YOU GET IMMEDIATE DELIVERY FROM YOUR LOCAL DISTRIBUTORS OF THESE POPULAR IDEAL PLANT MAINTENANCE PRODUCTS



**Built-in wrench.** Unique wings make WING-NUT easiest wire connector to screw on heaviest branch circuit wires. Splice is visible inside tough nylon shell. U.L. listed for 600 volts as pressure cable connector, and 105°C. U.L. approved for aluminum and solid and/or stranded copper wires. 2 sizes of WING-NUT available to meet all pigtail splice needs.



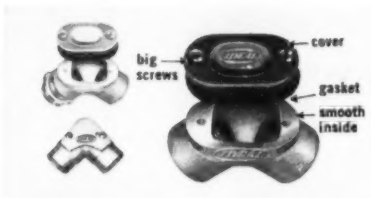
**America's favorite!** WIRE-NUT has long-proven performance record as lowest-cost method for all common branch circuit and fixture wire connections. Strongest, shake-proof wire joint possible. All 5 sizes U.L. listed as 300v fixture; large sizes 74B & 76B as 600v pressure cable connectors. Use WIRE-NUTS in all types of conduit, cable, non-metallic sheath and open wiring.



**Select Set-Screw or Crimp.** Only Ideal CRIMP has WRAP-CAP that insulates all around and even between wires. 600v U.L. approved for cadmium plated steel sleeve and vinyl 1-piece WRAP-CAP... now 2 sizes. 3 sizes of Ideal SET-SCREWS. All U.L. listed. Shell and connector easily removed and re-used. Tough shell has long skirt to prevent flash-over.



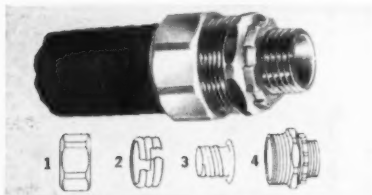
**Cut "fishing" time.** Highest grade, oil-tempered flat spring steel FISH TAPES will not curl. Flexible and easy for long, multi-bend conduit runs. Steel reel holds tape, is handled with safe, sure grip and ends danger of bending, kinking or breaking tape. Used with flexible leader, solves 90% of fishing problems. 1/4" and 1/2" tapes in 50, 100 and 200 foot coils.



**Easiest way around!** Ideal PULLING ELBOWS & ADAPTERS make wiring around corners a snap. Precision milled of malleable iron for rugged strength and perfectly smooth pulling. Precise 90° fit. Cadmium plated, chromate treated. Supplied assembled, complete with rigid domed cover, full neoprene gaskets and BIG screws. 1/2" to 2" sizes, in three styles.



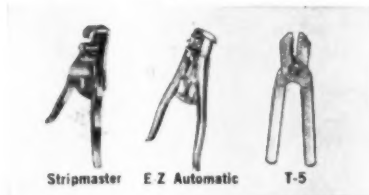
**Double protection—**Ideal VOLTAGE TESTER has a solenoid, calibrated indicator and a neon test lamp... each independent of the other. Safest, easiest for rugged daily use. Plastic safety yellow case, no-slip prods, prod storage space, fits pocket. Tests voltage, frequency, AC or DC, continuity, etc. Also model with resistor-fuses in prods to prevent arcing.



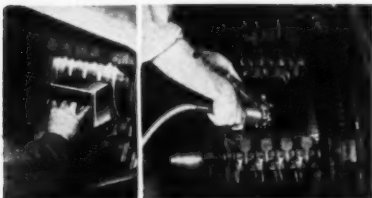
**Vap-Oil-Tite—**only completely reusable connectors for liquid-tight, flexible metallic conduit. Perfect seal. Positive ground, covers raw conduit end, fits EF and UA. U.L. approved. 90°, 45° and straight for 3/8" to 4" sizes. Easy to apply: Slip ring nut (1), and split ring (2), on conduit. Screw grounding bushing (3) inside conduit. Tighten ring nut over connector (4).



**Vacuum cleaners and blowers.** Blows dry air at high velocity but low pressure, so safe for delicate equipment. Light, balanced hand models for heavy, medium or light duty, complete with blower nozzle. Available with hand model or tank type cleaning attachments. Ideal CLEANERS do better job faster, at less cost. Universal type motor lubricated for life.



**Strip wires fast and easy.** "One-squeeze" STRIPMASTER strips both solid and stranded wire in 2 seconds. Heavy-duty E-Z AUTOMATIC cuts thru toughest insulation and strips wires clean without crushing ends. Low cost T-5 STRIPPER cuts, strips and loops wires. Fits flat in pocket. Strips 10 to 18 gauge. Many other special Ideal hand stripper models available.



**In-place motor maintenance.** Service commutators, motors without dismantling... use Ideal commutator resurfacers, brush seaters, flexible abrasives. All sizes and styles to fit any job. Ideal line also includes everything for commutator care: precision grinders, mica under-cutters and many specialized small tools. See your distributor.



**FREE MAINTENANCE PRODUCT CATALOG.** You can obtain your own free copy of the complete Ideal Maintenance Catalog giving details on thousands of items you need for regular and special maintenance jobs. For free copy, send your name, company name, and address to: IDEAL INDUSTRIES, 4297-E PARK AVENUE, SYCAMORE, ILLINOIS. Write today!

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## Profitable Reading for P.A.'s

### New Books

**Men, Money, and Motivation**, by Arch Patton. Published by McGraw-Hill Publishing Co., 330 W. 42nd St., New York 36, N. Y., 233 pages. Price: \$7.50.

Author Patton presents a philosophy that has proved to be eminently successful in motivating executive talent.

What is an executive worth? What effects do salaries and bonuses have on executive motivation? How effective actually are the various incentive plans? These and similar questions are discussed in this penetrating study. Compensation administration is approached not only from the point of view of individual performance, but also as a competitive weapon for attaining broad company objectives.

Emphasizing the incentive value of promotion, the author examines the dangers of a poor promotion policy and also enumerates the implications of individual-risk vs. company-risk promotion policies.

### From the Associations

#### IMS Clinic Proceedings

This publication contains proceedings of 24th Annual Industrial Engineering and Management Clinic, including complete transcripts from top leaders of management and labor. The various topics covered include: work measurement and simplification, cost controls, materials handling, human relations, and other management aspects. Copies of this 180-page book are priced at \$6.00 and are available from the *Industrial Management Society*, 330 South Wells St., Chicago 6, Ill.

### Arbitration Answers

The arbitrators decided in favor of the vendor in the case of the "Surplus Switches" on page 26. A written agreement may be superseded by an oral agreement, they said, but the evidence of an oral commitment would have to be strong. In this case, the electrical switch supplier hadn't really agreed to anything. It was probably wishful thinking on the P. A.'s part when he accepted the phrase "We'll see what we can do" as a promise to let him off the hook.

The American Arbitration Assn. is a private, nonprofit organization that helps businessmen, management, and labor find peaceful, fair-minded solutions to their quarrels. Many contracts between buyers and vendors contain a "future dispute arbitration clause," directing that any controversy or claim be settled in accordance with AAA rules.

Services of the association in adjudicating disputes are available in key business and industrial centers across the country.

For further information, contact the AAA at its main headquarters, 477 Madison Ave., New York 22, N. Y.

### From the Manufacturers

#### Solution Resins

Gives data on preparation and application of vinyl solution resins for coating metal, wood, paper, fiberboard, and rubber. Discusses mixing techniques, solvents, pigments, viscosity characteristics, etc.

Service Bulletin G-15 (24 pages). Advertising Dept., B. F.

Goodrich Chemical Co., 3135 Euclid Ave., Cleveland 15, Ohio.

#### Tubular Products

Contains prices, basic requirements, sample computations, and data on grades and types for "300" series stainless steel tubular products. Also discusses chemical requirements, chemical analysis, manufacturing processes, etc. *Tubular Products Div., Sumitomo Shoji New York, Inc., 149 Broadway, New York 6, N. Y.*

#### Folding Furniture

Gives information on folding tables, chairs, and trucks. Contains prices, physical advantages, construction features, dimensions, and more (16 pages). *Howe Folding Furniture, Inc., 1 Park Ave., New York 16, N. Y.*

#### Temperature Controls

Discusses and gives specifications for 17 different types of temperature controls. Includes six miniaturized local controls, seven electronic controllers, and four overhead detection models, etc. Catalog MC-203 (8 pages). *Fenwal, Inc., Pleasant St., Ashland, Mass.*

### Aids to Purchasing

**Directory of Manufacturers' Representatives (Agents)**. Published by the Manufacturers' Agent Publishing Co., 554 Fifth Ave., New York 36, N. Y., 217 pages. Price: \$20.00.

Directory lists more than 15,000 manufacturers' domestic and export representatives in the United States, Canada, and Puerto Rico. Listings are geographically arranged and include principal products each representative carries. The publication also indicates prevailing commission scales for the various products.

## LET MUELLER MAKE IT!

Mueller Brass Co. of Port Huron is much more diversified than the name "Brass" implies . . . a lot more. In fact, because of its many and varied facilities . . . its *men*, *methods* and *metals* . . . Mueller is in the unique position of being able to offer true single source service.

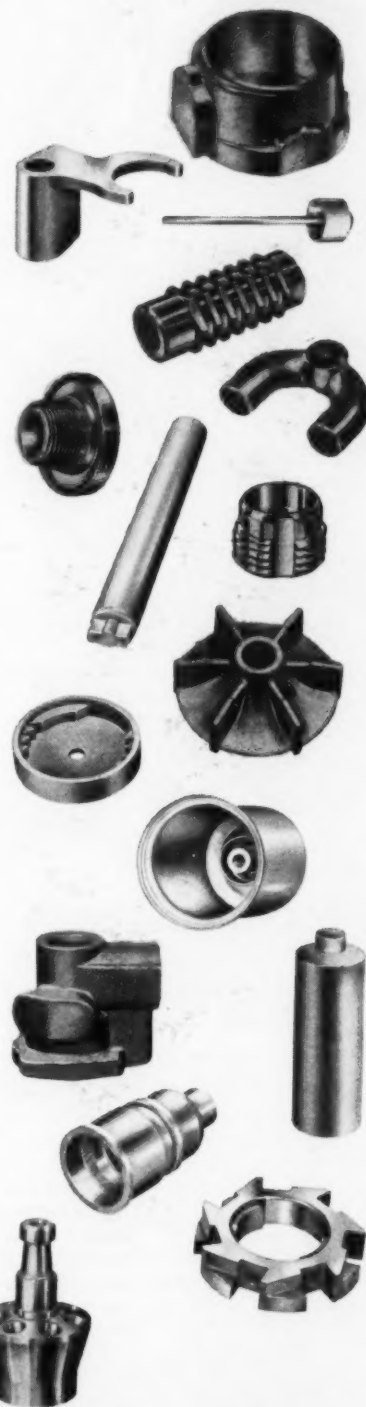
MUELLER HAS THE MEN . . . experienced engineers with the ability to work out, creatively, tough design problems, and improve a part or components for production by the most economical method. You get sound engineering plus 44 years of practical metalworking production experience when you "Let Mueller Make It".

MUELLER HAS THE METHODS . . . when you "Let Mueller Make It", you are utilizing one single source that is able to produce parts any one of these ways: as forgings, impact extrusions, sintered metal parts, screw machine products, formed tube or as castings.

MUELLER HAS THE METALS . . . and the materials . . . to produce precision parts in aluminum, brass, bronze, copper, iron and steel in hundreds of different alloys to meet each exact requirement.

In addition, Mueller Brass Co. has complete and modern facilities for performing all types of finishing and sub-assembly operations. Another plus value is nation-wide sales engineering service.

So, in the final analysis, no matter where you fit in the American industrial picture, whether you're making missiles or mowers . . . and no matter where you're located, it will pay you to LET MUELLER MAKE IT!

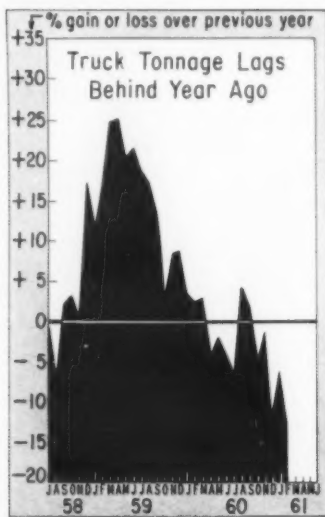


**MUELLER BRASS CO. PORT HURON 31, MICHIGAN**

See Us At Booth 701—Design Engineering Show—Cobo Hall, Detroit, May 22-25

340





## P/W TRANSPORTATION MEMOS

**RATE MANEUVERS:** Plagued by teamster wage hikes, rate bureaus are making selective rate maneuvers on a variety of fronts:

- Middle Atlantic Conference has threatened to increase the minimum weight on truckload shipments from 24,000 to 30,000 lb. Most likely shipper countermove: take their business to nonconference members.

- The Midwest Motor Freight Bureau is attempting to levy a new pickup and delivery charge: 12¢ cwt. on top of regular rates when its carriers cannot use road haul equipment to pick up or deliver volume shipments. Shippers consider the charge impractical to enforce.

- New England Motor Freight Bureau is still pushing for pickup and delivery charge increases on freight to New York City airports. Shipper strategy: strong vocal opposition.

**PUT UP OR SHUT UP:** That, in effect, is what an interstate trucker based in New York has told shippers who file "automatic" or "frivolous" claims.

Hermann Forwarding Co.'s Fred Hermann is sounding customers out on reaction to posting a \$5 deposit with each request for a claim investigation. Deposit would be refunded if all or part of the claim were justified. Big question Hermann faces: is the plan both feasible and legal?

**LEASE OR DRIVE?** A large truck leasing company, John J. Casale, Inc., reopened its 20-year battle with the ICC on the issue of providing drivers with leased trucks.

The ICC is expected to hold firm to its ruling that shippers who lease trucks cannot use leasing company drivers to operate them in order to remain free from regulation. The reason is simple: The commission has used the Casale case too often as a precedent since its original decisions on it in the 1940's.

### NIAGARA INCREASES:

Niagara Frontier Tariff Bureau has joined the parade of rate bureaus proposing rate increases aimed chiefly at small shipments. Niagara, which covers western New York, western Pennsylvania and part of West Virginia, wants to increase less-than 2,000-lb. shipments 10%; 2,000-4,999 lb., 8%; 5,000-lb. and over and truckload shipments, 5%.

### "DON'T FENCE US OUT":

Biggest remaining roadblocks to rail mergers are "outside" lines who want "in," or at least some safeguards to their own traffic. Examples:

- New York Central, still jockeying for a place in the pending B&O-C&O tie, has asked the ICC to consolidate Eastern rail merger hearings, which involve 16 railroads, to get entire Eastern rail structure reorganized at one time.

- Chicago, Milwaukee, St. Paul & Pacific has told the ICC it wants to intervene in the merger of four of its big Western competitors—Great Northern, Northern Pacific, the Chicago, Burlington & Quincy, and the Spokane, Portland & Seattle. The Milwaukee aim: to get conditions laid down to protect its traffic.

### WHISTLESTOPS: Erie Canal

has been deepened to 13-ft., along 64 miles of its length, allowing a 12% increase in barge cargo capacity, New York State officials say . . . **Briggs Transportation Co.**, St. Paul, Minn., acquired McCoy Truck Lines, Waterloo, Iowa, adding direct service from Chicago and Duluth-Superior to Omaha . . . **Wings & Wheels Express**, New York-based air freight forwarder, has entered the Texas market with a Dallas office. Expanded service follows cooperative agreement with Yale Express to speed deliveries from Yale's New England and Middle Atlantic customers to 38 markets served by Wings & Wheels . . .

**Improved service to Puerto Rico** was promised by new owners of Bull Steamship Co. Bull and its parent company, American Coal Shipping, Inc., were sold to Coastwise & Puerto Rico Maritime Corp . . . **Red Ball Motor Freight, Inc.**, purchased intra- and interstate operating rights of Denver's bankrupt Centennial Truck Lines, and has contracted to purchase Couch Motor Lines, Shreveport, La., pending ICC approval . . . **Flying Tiger Line** has opened an Atlantic freight sales office.



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**LET MUELLER MAKE IT!**

When you work with the Mueller organization, a qualified team of trained, experienced and imaginative engineers automatically become part of your staff and go to work for you. This engineering team, which includes specialists in all categories of design work and production procedures, carefully considers all aspects of your particular part or assembly and its function. In conjunction with members of your engineering department, Mueller engineers can help design or re-design your part for improved performance, eliminate, where possible, unnecessary parts through re-design by making two or three part assemblies as a single piece, and recommend the best method of production. Mueller people also consider ways of speeding your finishing and assembly operations. Production economies consistent with product quality are always a prime consideration.

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## Union Tank Car to Build Terminal For Bulk Liquid Storage in Chicago

**Chicago**—Union Tank Car Co. will build a \$17-million bulk liquid storage terminal at Lake Calumet Harbor, on Chicago's south side.

The giant terminal, to be completed in two years, will serve as a storage facility for liquid cargo carried by ocean vessels using the St. Lawrence Seaway, lake tankers, inland waterway barges, railroad cars and tank trucks. It will have an ultimate capacity approaching 200-million gal. and will include a plant for the handling and packaging of liquids.

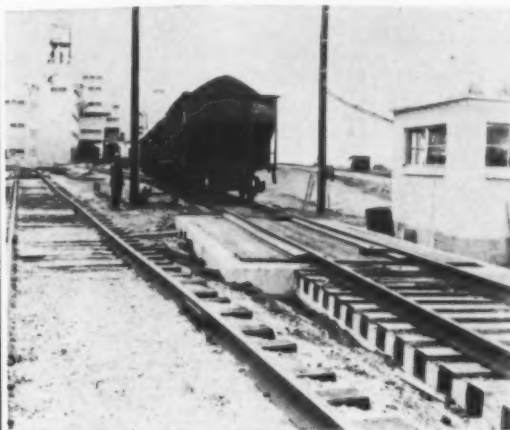
Bulk products that can be stored will include petroleum, chemicals, petrochemicals, vegetable oils, molasses, animal fats and granular commodities, according to E. A. Locke, Jr., Union Tank Car president. There will be tanks for heavy fuel and high viscous material, requiring heat.

### Dredging Project

Union Tank Car will dredge 2-million yd. of clay from the adjoining basin at the southeastern end of Lake Calumet. This will enable ocean-going vessels to enter the lake and will make it possible for other areas of the harbor to be developed for dock and warehousing sites in the future, Locke said. Initial dredging work is expected to begin this week.

The project is part of the private development phase of the

Port of Chicago, under which federal funds will be made available for deepening the Calumet River channel to 27 feet, to conform with the St. Lawrence Seaway draft. If channel deepening work is completed by the Corps of Engineers as anticipated, 510-foot vessels could use the channel by the time the 1962 sailing season opens, and bulk liquid cargo can be moved from mid-America points to Lake Calumet 12 months a year.



**WEIGHING IN:** Fairbanks-Morse scale (foreground) will weigh approaching hopper car while in motion. Weight will then be printed in three seconds by . . .



**MODEL "Q" BALANCER:** This device records weight on an adding machine, typewriter, tape or punch card. Balancer, alone, costs from \$8,000 to \$10,000.

## Four Truckers Team Up On Equipment Swapping In 12 Western States

**Portland** — Four heavy-haul trucking companies have teamed up to provide equipment interchange in the 12 Western states including Texas. The service is aimed at speeding deliveries and providing lower rates on transportation of heavy machinery, contractors' equipment, building materials, etc.

Under the arrangement, all four carriers can offer an irregular route, common carrier service to metropolitan areas as well as off-route points and job sites. The load can be delivered as the original load direct from initial shipping point.

## Rails Ask Rate Cut On Midwest Cement Hauls

**Chicago**—Rail freight rates for cement shipped in the Western Trunkline country will be reduced below truck rates on June 6. The Soo Line and other upper-Midwestern railroads have filed with the ICC a rate cut averaging 15% on cement shipments in Minnesota, Montana, North and South Dakota, and Saskatchewan, Canada.

The new rates will apply to some 20 cement producers to five major cement producing points around Duluth, Minn.; Regina, Sask.; Mason City, Iowa; Rapid City, S. D.; and Trident, Mont., who ship via the Soo Line, Great Northern, Northern Pacific, Milwaukee Road, and Chicago and North Western.

People whose business is shipping, packaging, and manufacturing are switching to Ludlow 2-Strip Case Sealing. They've discovered that Ludlow 2-Strip Case Sealing with Snaketape and Glaspun tape ends excess sealing costs, turtle-slow shipping operations, and carton failures enroute!

Here's dramatic proof. Ludlow 2-Strip Case Sealing, in on-the-job tests, out-performed the old-style 6-strip paper tape method with these scores: 278% stronger; 66% less expensive; 66% faster! Ludlow 2-Strip Case Sealing turned in outstanding performance against stapling and glueing as well. Ludlow reinforced tapes should be working for you if they are not already. Get the details. Just fill out the coupon at right and mail it today.

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# Foreign Perspective

MAY 15-21

**Brussels**—Export prices on the Brussels Steel Exchange continued to firm up, with increases of \$1 to \$2 per metric ton on such products as bars, plates and shapes. Strip, wire products and wire rods remained stable.

Observers said the price rise was due more to conditions on the Continent than to increased buying of foreign steel by the U. S. European mills are reported booked several months ahead, which means American P. A.'s who want to get steel shipments through Great Lakes ports will have to determine their buying policies soon in order to beat the winter closing of the St. Lawrence Seaway.

Export prices on the Brussels market, f.o.b. Antwerp, included: merchant bars, \$101-\$102; structural shapes, \$100-\$103; commercial quality plate, \$101-\$102; galvanized wire, \$128-\$130; wire rods, \$103, and hot rolled strip, \$110.

• • •

**Hanover, Germany**—Visitors to the giant International World Trade Fair here agree that most German exporters are passing the cost of the recent 5% revaluation of the mark to their foreign customers.

Capital goods prices are up 3% to 5%, with German exhibitors emphasizing technical improvements and short delivery times rather than costs. German exporters of semifabricated and raw materials, however, have not been able to bury higher prices quite so easily. In many cases, these exporters have elected to absorb the revaluation themselves or to hold price increases to a maximum of 2% to 3%.

Interest of buyers at the fair indicated that the price hikes will have only a minor influence on the volume of German

export trade. This conclusion is borne out by the German trade figures for March, the first month following the revaluation, which show exports down only 1.6%, compared with March, 1960. This is much less than the 5% decline which had been expected as a result of the revaluation.

• • •

**Rio de Janeiro**—Brazil hopes to boost its exports of manufactured products through a new regulation which allows manufacturers and processors to recover import duties on materials used in making goods for foreign trade. Refunds will be made on imports of raw materials, unfinished goods, parts, as well as materials for packaging export products. In some cases, the customs forgiveness may run as high as 60%.

• • •

**Tokyo**—Evidence that the Japanese are gunning more and more for American machine tool markets comes with word that Tsugami Mfg. Co., Ltd., has retained a Los Angeles firm to analyze the U. S. sales potential for Japanese-made heavy production machinery. The nationwide market study, which will take four months to complete, is being conducted by Ward J. Jenssen, Inc.

• • •

**Washington**—Congress may authorize a study this year of the feasibility of keeping the St. Lawrence Seaway and the Great Lakes open on a year-round basis.

The plan is backed by a bipartisan group of senators and representatives, who want the Army Corps of Engineers to make a detailed investigation of de-icing systems to determine whether any of them would be economical.

It is believed technically possible to keep the Seaway route from Montreal to Duluth open the entire year, but according to Rear Adm. Edward R. Thiele, engineer-in-chief of the Coast Guard, this can be done "only at a very high cost." Great Lakes shippers in general feel the price is worth paying and that only when the Seaway goes into operation 12 months a year will it accelerate Midwestern economic growth in the way that was expected.

• • •

**Paris**—Four major European airlines—Air France, Alitalia, Lufthansa and Sabena—are reported close to agreement on formation of an Air Union. Initially seen as a market coordinating association, the Air Union may prove to be the first step toward pooling of all sales and services by the carriers.

• • •

**New York**—Italian products will increase their penetration into the U. S. market as a result of two new licensing agreements between Italian and American firms.

• W. R. Grace & Co. will market polypropylene to be produced at a new plant in Neal, W. Va., now being constructed by Novamont Corp., a subsidiary of Montecatini, of Milan.

• Hevi-Duty Electric Co., a division of Basic Products Corp., Milwaukee, will manufacture and sell in the U. S. the complete line of electrical induction melting and receiving furnaces produced by Forni Elettrici A. Tagliaferri, Milan.



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**1** Clik-Stop's Golden Knurl locks jaws automatically under turning pressure. No buttons, levers, gadgets to remember.

**2** Clik-Stop jaws stay where they're set ... automatically. No re-setting the Golden Knurl every time wrench is laid aside.

**3** Slim head, square jaw permit full seat on fittings.

**4** Drop forged Protoloy® alloy steel. Equals or exceeds performance of all other makes.



Find out why some plants have already standardized on Proto's Clik-Stop®. Available in 4", 6", 8", 10", 12", 15", 16", 18", 20" sizes. Chrome or Black Industrial Finish.

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## Foreign News in Brief

### Leyland Buys STI

**London**—Leyland Motors, Ltd., a manufacturer of heavy vehicles, has acquired for \$56-million the smallest of the five major British auto makers, Standard-Triumph International.

Prime reason for the merger: Leyland wants to strengthen foreign sales by offering small trucks and automobiles in addition to heavier vehicles. Standard's present line includes a complete range of vehicles—from large trucks and buses down to small sports cars.

The merger gives Standard, which was hit harder than any other British auto maker by the industry's recent recession, additional capital backing plus access to the worldwide Leyland sales network.

### Joy Gets French License

**St. Louis**—Joy Mfg. Co. said it has acquired a license from a French firm to manufacture in the U. S. a line of terminal strips for airborne electrical systems.

A spokesman for the company described the product as a modular, expandable terminal bus which permits the addition or subtraction of cable attachments of different sizes off a single strip. They said the main features are "complete flexibility, high strength, minimum weight, extreme compactness, easy access and maintenance, and absolute dependability."

Developed by the French firm, Air Co., the device has been used in making that nation's Carvelle jet plane, he said.

### New Pushbutton System

**Tokyo**—Toshiba has just brought out a pushbutton system that eliminates telephone dialing. It is retailing here for \$161.50.

The device can call 29 circuits of 10 digits each. A red light turns on when a call is made, and if a wrong button has been pressed, a special button can be pushed to cancel the call. Conversation can be amplified on a built-in speaker.

If the number being called is busy, an Auto-Dial can be set which will automatically try to reach the number five times at 25-sec. intervals. During this time, the telephone can still receive any incoming calls.

### New Chemical Plant

**London**—Courtaulds, Ltd., this week announced plans to build a plant to make monochloroacetic acid and sodium monochloroacetate.

The plant, to be located at British Celanese, Ltd.'s Spondon factory, will use a continuous high-yield process new to Britain. Details of the process, plant cost and capacity have not been disclosed, but production is being planned to meet both U. K. demands and to enable the company to enter export markets.

### New U.S. Subsidiary

**Wilmington, Del.**—English Electric Co., Ltd., of London, a manufacturer of heavy electrical equipment, has incorporated a

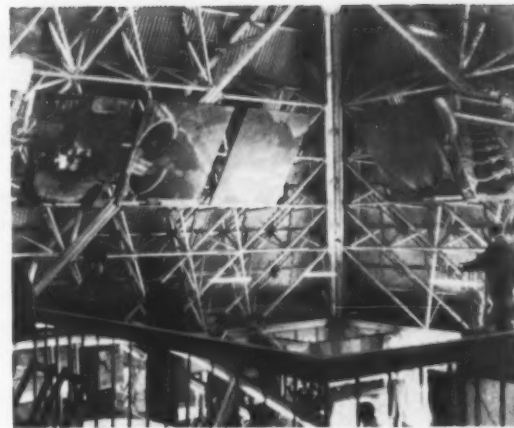
wholly owned subsidiary here to handle sales in the U. S.

The new unit, English Electric Corp., will consolidate the activities of English Electric & Export Trading Co., Marconi's Wireless Telegraph Co., Marconi Instruments, and English Electric Valve Co., all of which are controlled by the London firm.

The company said the largest U. S. contract received to date was for 10 water turbine generating sets and five transformers for the Priest Rapids dam in Washington.



**JAPAN TRADE SHOW:** Striking all-aluminum structure built in Japanese style by Hitachi, Inc., was top attraction at the fourth annual exposition in Tokyo.



**CROWDS FILING THROUGH** viewed pictures as well as products themselves. Exhibitors represented many countries from all parts of the globe, including U. S.

## PROCESS PIPING STANDARDS HAVE CHANGED

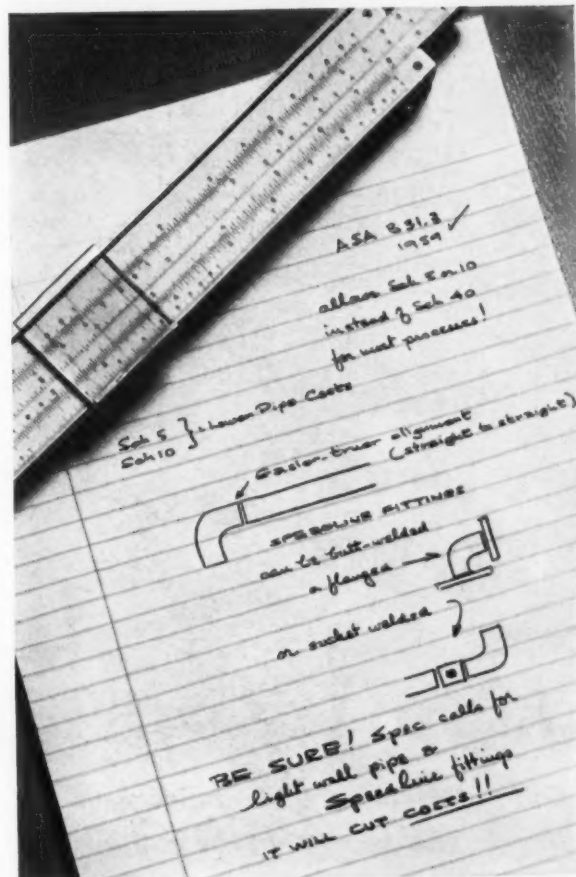
### IT WILL PAY YOU TO BE UP-TO-DATE

If you're familiar with the latest issue of the Code for Pressure Piping ASA B31.3, you know process piping standards have changed. Pressure-Temperature operating conditions should be re-evaluated. Now *your* specifications can take advantage of economical *light wall* pipe and improved *Speedline fittings* design to meet the most critical process line requirements!

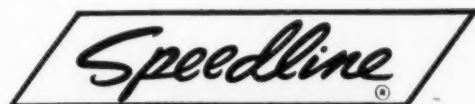
Once you "up-date" your specifications via this new code, important cost savings follow *down the line*. Savings in materials cost are definite—Schedules 5 and 10 stainless pipe simply *costs less*. Speedline fittings design accounts for significant additional savings in the total installed cost.

The Speedline "extra length" feature makes it easier to butt-weld joints . . . assures faster, truer alignment every time because connections are always made "straight to straight". All types of flanged connections, too, can be made more readily . . . without fouling problems—even welding can be eliminated with Speedline Insert Flanges—just roll them on.

Speedline's design advantages give complete freedom of choice—you can butt-weld, flange, socket weld or use unions . . . and *one fitting* can be used *all ways* when Speedline is specified.



Real economy in process piping is a matter of *specifications*—and Speedline fittings. Make the most of *both*. Study ASA B31.3-1959 for up-to-date data on light wall lines for *your* application. Get detailed data on bonus savings possible *only* with Speedline corrosion-resistant fittings. The Speedline Distributor near you is listed on Page 1494 of Chemical Engineering Catalog. Call him today.



### CORROSION-RESISTANT FITTINGS

STAINLESS STEEL • ALUMINUM • SPECIAL ALLOYS

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A PRODUCT OF HORACE T. POTTS COMPANY • 588 E. ERIE AVENUE, PHILADELPHIA 34, PA.



# P/W REPORTS ON RESALE PRICES

## Latest Auction Prices

### MARCH 8-9

Auction held at Barrett Machine Co., Tucson, Ariz. Auctioneer: David Weisz, Los Angeles.  
 Ingersoll-Rand Imperial compressor, 13 x 12. \$500.  
 Quincy 5-hp compressor. \$200.  
 Sullivan compressor, Buda engine. \$90.  
 Hobart 300-amp portable welder, 20-hp motor. \$180.  
 Lincoln 200-amp welder. \$205.  
 300-watt a.c. generator, gas engine. \$80.  
 Delco 60-kw generator. \$1,650.  
 Generator, 25-kw, diesel engine. \$1,200.  
 Caterpillar diesel generator. \$1,000.  
 Air tugger with air motor. \$250.  
 10-hp centrifugal pump. \$115.  
 1½-in. pump with gas engine. \$120.

### MARCH 16

Auction held at Buckeye Manufacturing Co., Newark, N. J.  
 Leeson 108 coil winder. \$1,350.

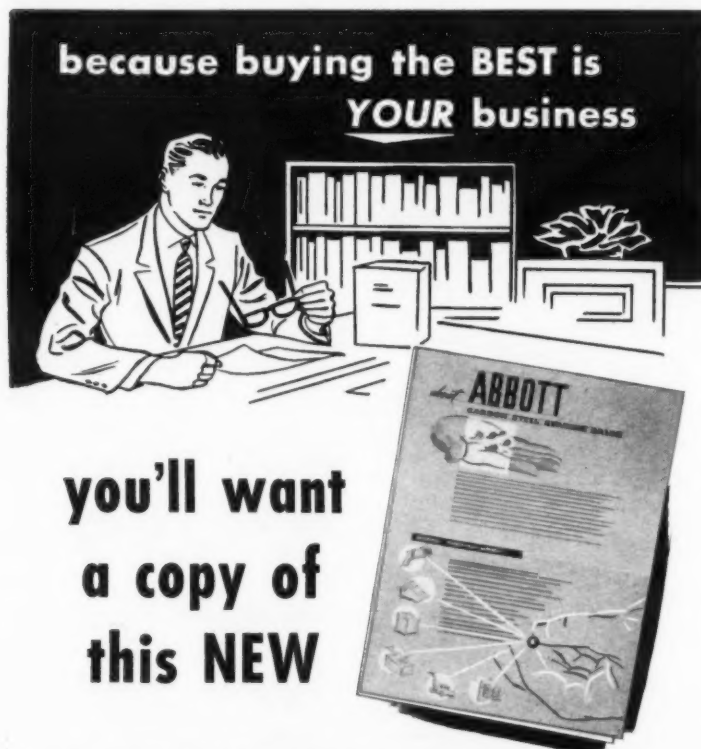
Four Leeson 3-station universal coil winders. \$200 to \$250.  
 Two Globe 1D35 coil winders. \$100 and \$130.  
 Bridgeport DH7316 universal milling machine. \$1,200.  
 Burke B1004 hand miller. \$200.  
 Atlas 6 x 24-in. bench lathe. \$110.  
 Logan 200 6 x 24-in. lathe. \$125.  
 Buffalo 15-in. drillpress. \$60.  
 Walker-Turner 4-spindle, 15-in. drillpress. \$385.  
 Rivett 104 universal grinder. \$1,150.  
 Five Stinson No. 10 riveters. \$130 to \$285.  
 Four Standard Tool Co. air-operated plastic presses. \$100 each.

### MARCH 21-22

Auction held at American Engineering Co., Philadelphia. Auctioneer: David Weisz, Los Angeles.  
 Logan 10 x 36-in. lathe. \$300.  
 National 16 x 6-in. engine lathe. \$400.  
 22-inch heavy-duty drillpress. \$285.  
 Baker fork lift truck, old. \$125.  
 International TD 14 tractor, with dozer. \$2,250.  
 International TD 6 tractor with front loader. \$1,700.  
 Partomag 1¼-in. power-fed drillpress. \$350.  
 Carleton 3-hp motor. \$1,600.  
 Pratt & Whitney 14 x 54-in. toolroom lathe. \$2,600.  
 Pratt & Whitney 16 x 54-in. lathe. \$3,350.  
 Fellows 612A gear shaper. \$500.  
 Fellows 615 gear shaper. \$1,000.  
 Landers die-threading machine, Type 14, 5-hp motor. \$1,225.  
 Van Norman No. 12 miller with swivel head. \$725.  
 Cincinnati No. 4 vertical miller, 10-hp. \$300.

### APRIL 25

Auction held at Kellogg Switchboard & Supply Co., Division of International Telephone & Telegraph Co., Chicago. Auctioneer: Samuel L. Winternitz & Co., Chicago.  
 Kellogg explosion-proof Model M2 telephone set. \$16.  
 Four Kellogg MasterPhone desk sets. \$16 each.  
 109 Kellogg telephone hand sets. \$1.25 each.  
 100 Federal 814-A marker switches. \$1.50 each.  
 17 multiple-position selector switches. \$2.50.  
 806 C. P. Clare stepping relays. \$2.50 each.  
 105 assorted stepping relays. \$3 each.  
 16 Barber-Coleman 2804-S micropositioners. \$1.25 each.  
 50 Ohmite AB 2-watt variable resistors. 10¢ each.  
 150 Amperite thermal time delay relays. 20¢ each.  
 28,000 30-volt telephone lamps. ½¢ each.  
 500 Amphenol 16-circuit gold-plated terminal plugs. 20¢ each.  
 3-in. production line testing oscilloscope. \$37.50.  
 7 Bodine 1/60-hp 24-volt d-c motors. \$2.50 each.



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 sion of old Abbott standard ball nomenclature to the  
 new, simplified AFBMA\* nomenclature. Also presented  
 is useful new selection information on the Abbott lines  
 of steel burnishing media and die-forged decorative  
 balls and shapes, called Abcoforms.

\* Anti-Friction Bearing  
 Manufacturers Association



**THE ABBOTT BALL  
 COMPANY**

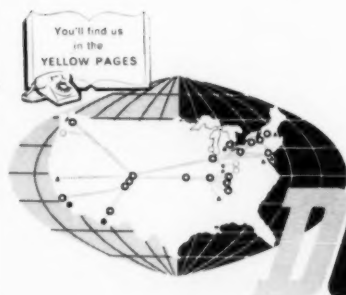
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 Hypot 3000-volt high-voltage tester. \$27.50.  
 8-inch pipe threader. \$5.  
 Studebaker AH-100 2000-lb. hydraulic press. \$20.  
 Dennison 1000-lb. hydraulic pump. \$25.  
 Federal 5-9126 electric oven. \$5.  
 Yale 2-ton spur gear chain hoist. \$22.50.  
 Yale duplex 3-ton hoist. \$10.  
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 1850 lbs. brass and aluminum parts. \$340.  
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 Fairbanks platform scale. 500-lb. capacity. \$7.50.  
 Anderson 1585 2000-amp, 40-volt switch panel. \$40.  
 3 2000-amp single-pole, double-throw knife switches. \$35.  
 20,000 assorted small resistors, capacitors. \$500.  
 Several thousand low-voltage relays, key switches. \$50.  
 Several thousand 8-pin radio tube plugs and fittings. \$35.  
 90 steel shop stools. 25¢ each.  
 Boston 14-b wire stitcher. \$20.  
 Pratt & Whitney floor drillpress, belt speed changer. \$10.  
 3 universal 6-head tube winders. \$10 each.  
 Economy hydraulic lifter. \$100.  
 Ebco water cooler. \$7.50.  
 Thermofax duplicators. \$15.  
 Spencer industrial vacuum cleaner. \$20.  
 Plantman industrial floor sweeper. \$10.  
 2 Simplex 5-ton lift jacks. \$8 each.  
 5 nine-drawer wooden blueprint cabinets. \$17.50 each.  
 3 wooden adjustable drafting tables. \$10 each.  
 12-foot steel shop truck. \$5.  
 2 hydraulic wheeled jacks. \$15.  
 3 mailing tape dispensers. \$5 each.

## Conoco Joins in Seeking Solution to Price Wars

**Dallas**—Continental Oil has joined the parade of oil companies trying new ways to overcome one of the petroleum industry's most perplexing and costly problems—retail gasoline price wars. It joins other firms such as Esso Standard, Mobil Oil, Phillips Petroleum, Shell Oil, and others who in the last few months have started what many oil marketers refer to as "noble experiments."

Conoco's plan (inaugurated May 1 in Colorado) has the same basic goal as the others. It attempts to discourage dealers from getting involved in price wars by refusing to subsidize them when they do.

As many of the marketers realize, what they are attempting has its ticklish aspects. The various plans are causing some dealer and distributor complaints, and if these become vociferous enough, they could lead to more federal investigations. But the stakes are high enough to warrant such risk, most oil people feel.

Subsidization, called "temporary voluntary allowance" or TVA in the industry, is a practice that had become pretty well universal in gasoline pricing over the past 10 years.

TVA's started out with the purpose of protecting dealers who got involved in price cutting through no fault of their own, oil marketers say. But some marketers contend that such practices have encouraged many dealers to promote price wars.

Thus, Conoco and the others feel it is the time to start moving away from the TVA's regardless of the outcries such moves may bring.

## Coming Auctions

### MAY 16

Gray Iron Foundry, Melrose Park, Ill. (Formerly owned by American Brake Shoe Co.)

Land and buildings. Sandslingers, mullers, molding machines, coreblowers, cupolas, machine tools, cranes, scales, etc. WRITE, WIRE, PHONE: Industrial Plants Corp., 319 S. LaSalle, Chicago.

### MAY 23

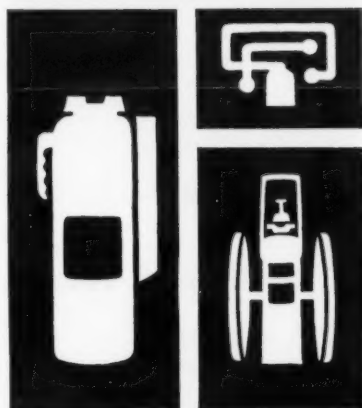
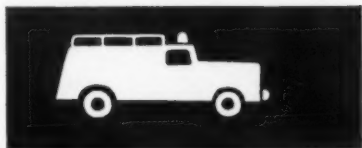
Anderquist Lumber Co., Burnt Ranch, Calif. Sawmill equipment, planing mill equipment, trucks, tractors, carriers, electric motors, office equipment, buildings.

WRITE, WIRE, PHONE: Industrial Plants Corp., 7213 Melrose, Los Angeles.

### MAY 23

Frank Whiting Division, Elmore Silver Co., 397 West Main St., Meriden, Conn.

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 your company's  
 fire protection  
 program...now,  
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WRITE, WIRE, PHONE: Industrial Plants Corp., 90 West Broadway, New York, N. Y.

### MAY 25

Hyde-Murphy Co., Ridgeway, Pa.

Woodworking equipment: tenoners, saws, sanders, molders, veneering equipment, complete saw file room, shapers, boring mills, mortisers, spray booths. Large quantity lumber. 250,000 feet of veneer.

WRITE, WIRE, PHONE: Industrial Plants Corp., 90 West Broadway, New York.

### JUNE 8

Miami, Fla. (Name and location of firm available from auctioneer).

Late model (up to 1958) squaring shears, press brakes, sheetmetal machinery, welding equipment, air compressors, heat treating equipment, presses, drill presses, lathes, millers, saws, toolroom equipment.

WRITE, WIRE, PHONE: Industrial Plants Corp., 90 West Broadway, New York.

## Weaker Prices Seen For Older Equipment

**New York**—There's a dearth of top-notch late-model equipment going under the hammer, in contrast to late last year when a large amount of post-1955 machines were being sold at auction all over the country.

The shortage is the major factor in today's upward price trend for this type of equipment. The combination of more buyers and less equipment is resulting in higher bids.

The situation in older types of machinery (mostly pre-World War II) is a lot different. Here the supply is plentiful and prices have been dropping steadily.

Used machinery experts are speculating on what effect the Kennedy Administration's capital investment tax credit program will have on the resale machinery market. They see it as primarily affecting old machinery as firms dump obsolete equipment in an effort to raise capital for purchase of new ones.

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 handles 500 eggs  
 per minute in  
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 System

◆ With split-second precision, **DIAMOND** Conveyor Chain receives, moves, positions 240,000 eggs during each eight hour shift. It's a high-speed operation where a momentary foul-up could cause a king-sized omelette; where synchronization, timing and dependable, trouble-free service are absolutely essential. That's why Food Machinery and Chemical Corporation specifies **DIAMOND** Conveyor Chain for its electronically controlled Automatic Egg Handling System.

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**DIAMOND**  **ROLLER CHAINS**

FMC System utilizes electronic "brain" to weigh, record, code, count, treat, pack and date 30,000 eggs per hour. Actual egg handling is accomplished by **DIAMOND** Conveyor Chain equipped with special attachments and nylon egg cups.





**THE JURIES:** Georgia P.A.'s divided into groups of nine to review different cases and give their views on the legal decisions involved. In turn . . .



**THE JUDGE:** A real jurist advised what his rulings would be. Here P.A. Charles Hayes (standing) of Emory University disagrees with the judge's verdict.

## Georgia P.A.'s Match Legal Lore With Real Judge at Monthly Meeting

Atlanta—Four lawyers and a judge added a courtroom touch to the monthly meeting of the Purchasing Agents Assn. of Georgia, as P. A.'s matched their knowledge of law with that of their guests.

Program Chairman Howard Baer, Howard Paper Co., made up a set of legal problems that a P. A. might easily run into.

The dinner meeting was held in a large ballroom, with round tables set up cabaret style—nine purchasing agents and one lawyer to each table. Each table worked on a different problem, with the advice and counsel of the lawyer at that table.

During the meal, the groups discussed their problems. Afterward, in legal style, the purchasing-agent "judges" wrote their opinions. Each lawyer then went to the podium to read his group's legal problem and the majority opinion rendered by the purchasing agents at his table.

After each opinion was read, a real judge—Edward Wright, of Fulton County Civil Court—told the P. A.'s how he would have decided the case in his court. The P. A.'s then held a free-for-all discussion, often disagreeing with the judge's decisions.

### Sample Problem

Here is one of the legal problems tackled by the Georgia P. A.'s:

Teller, purchasing agent of Grinder Lump & Glob Co. received a quotation for 3,000 machined parts from Smith Co. at a cost of \$36,000, f. o. b. the Grinder Co., 2% cash discount allowed if purchase paid for within 10 days.

Teller sent an order to Smith Co. for the parts, showing the price as \$36,000 f. o. b. our door, 2%-10 days." He also wrote on the order, "Please ship via American Railroad Co."

Enroute to Grinder Co., the American Railroad car carrying the parts was derailed, and the parts were slightly damaged. Grinder Co. decided the parts could not be used in this condition and immediately ordered the Smith Co. to send another 3,000 parts.

Smith Co. did, and sent two invoices for \$36,000 each. Teller returned the invoice for the first order and told Smith to fight it out with the American Railroad Co., since their obligation was to get them to Grinder in good condition because the terms were f. o. b. Grinder Co. Smith refused and sued Grinder.

The question: Can Smith recover the cost of both shipments from Grinder?

P. A.'s view: "Yes, Smith (the seller) could recover the money from Grinder."

Judge Wright agreed. "Smith Co. would have to take the loss only if there was negligence on the part of that company," he said. "Goods belong to the purchaser after the seller has delivered them to the railroad. Furthermore, if the order was shipped according to the buyer's stipulation, that absolved the seller of the responsibility."



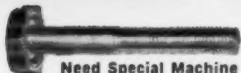
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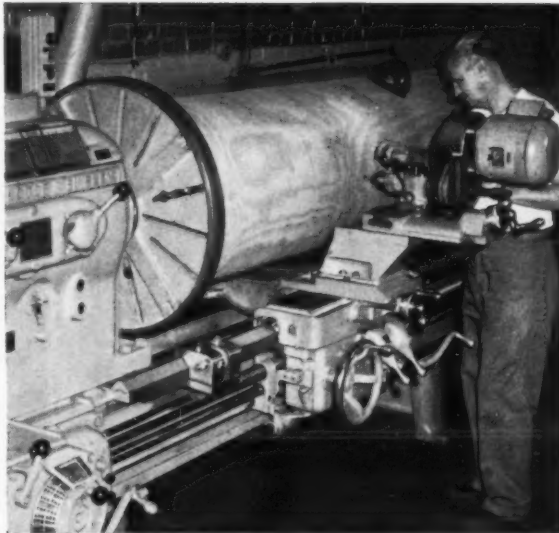
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WILLIAM K. DAVIS, VP



# Price Is Big Point at Materials Handling Show

(Continued from page 1)  
a lift truck. Others said they were considering vehicles that would haul personnel, production materials, warehouse stock, put maintenance men up near the ceiling when necessary, and even dig post holes.

One P.A. said he was pressuring his company to hire its own materials handling engineer. "I have to sit on top of our regular plant engineers; they always want the fanciest and most expensive equipment," he said. He said he objected to consultants because they tended to feel they weren't doing their job unless they came up with a complicated answer to every problem.

## 'Go Overboard'

"They go overboard," he said. "I can recall an intricate conveyor setup where the consultant insisted on a unit which the shipping men later used as a packaging table. I could have bought a table for 1/200th of what it costs."

Equipment leasing is a growth trend, most vendors agreed. One lift truck distributor, for instance said more than 65% of his business now is in leasing and servicing. But entire system leasing—except in rare instances—is virtually unheard of. "A conveyor system has to be custom built," noted one vendor, "and that's why it generally must be purchased."

## How Much?

The most common question at the show appeared to be: "How much?" Vendors were a little put out by the constant harping on price.

"They want to get bids from 30 firms and take the lowest one, without evaluating how much it is going to cost in the end," said one.

But a capsule survey showed some buyers not so interested in initial cost (as vendors generally charged) as they were in overall cost.

Despite the abundance of

modern equipment on display there was a feeling that in the next decade much better items would be needed. A Pentagon buyer said the Armed Forces will need—and probably get—the following:

- A fast conveyor line on which parts will receive their complete packaging from sprays, like mothballing.

- Giant pneumatic conveyor systems that run underground or under water. This would provide fast handling of supplies during peace-time and assure a

hidden lifeline for handling in case of war.

- Fully mechanized freight terminals that will provide automatic cargo selection which might include photographic labeling of packages, accompanied by remote control.

- Rocket transported cargo that will make intercontinental deliveries in one hour or less. This would be an integrated system that is adaptable and workable for all purposes. This would require development of advanced ground handling equipment.

## North Jersey Assn. Scores a First By Electing a Woman as President

Newark, N.J.—The first woman president of an NAPA affiliated association was elected by the Purchasing Agents Assn. of North Jersey. Irene Gordon, chief purchasing agent of Wallace & Tiernan, Inc. in Belleville, N.J., takes office July 1.

One of the six founders of the



MISS IRENE GORDON

North Jersey association in 1954, Miss Gordon has some ideas

about running an association that she'll lose no time in putting into operation.

Far from running things as a "one woman show," she told PURCHASING WEEK, she will campaign actively for "more working, and fewer card-carrying members." In this connection, she will encourage fewer "one-man committees" in order to spread the credit around among members.

"Too many people in our field," she said, "fail to take into account the credit they can reflect on their companies through actively participating in an association." In line with this, she will emphasize the "management benefits" to members of active participation.

When committee chairmen meet in June to formulate plans, she will ask them to consider plans for stressing this participation. In addition, education and value analysis programs will be accelerated. A chief aim will be increasing seminars and courses.

The association elected one other new officer. Norman Wiss, Jr. of J. Wiss & Sons became treasurer, filling the spot Miss Gordon has held since the association's beginning.

## Union Carbide to License Diepoxide Resin Patents To Promote Development

New York—Union Carbide Chemicals Co. has announced plans to license a number of its diepoxide resin patents, beginning with seven resinous compositions containing or based on UNOX Epoxide 201.

Primary objective of the licensing plan is to encourage present and prospective users of UNOX Expodix 201 to expand development efforts as rapidly as possible. The company also predicted that the basic cost of the material will be reduced as production volume increases.

Licensing agreements completed before April 1, 1962, will include an "annual-fee" option guaranteeing early licensees a competitive advantage through April, 1964. The option will let licensees pay \$250 prior to April 30, 1962, in lieu of running royalty payments for the period from April 1, 1962, through March 31, 1963. It will also permit original licensees to pay \$500 prior to April 30, 1963, so that no royalties or reports will be required from April 1, 1963, through March 31, 1964. No royalty will be payable under any of the UNOX Epoxide 201 patents prior to April 1, 1962. After that date, a royalty of 2¢/lb. of UNOX Epoxide 201 used to manufacture patented compositions will be charged.

## Reclamation Bureau Hits At 'Book Prices' in Bids

Washington—The Bureau of Reclamation has struck a blow against the use of "book prices" in submitting bids. In 14 recent cases the bureau rejected all bids because of this "follow the leader" practice. In each case, there was a low bidder—all the bids were not identical. But the bureau felt they were not "competitively" lower, but were still based on "book prices" with arbitrary dollar amounts knocked off.

All the cases involve bids on about \$1.25-million worth of materials for high voltage transmission lines in Arizona and California. The bureau doesn't accuse anyone of collusion, though the identical bids have been sent to the Justice Dept. for study. What the bureau does say, however, is that the bids, even the low ones, were submitted without consideration of individual company costs.

All the 14 items have been re-advertised for bidding. Bureau officials note that the action already has had some effect: At least one firm which traditionally used "book prices" in bidding has dropped the practice.

This Week's

## Purchasing Perspective

MAY 15-21

(Continued from page 1)

Also not to be overlooked is the fact that more and more purchasing executives have realized that through application of more refined, scientific buying techniques they can rival sales in their contribution to over-all corporate profitability.

Also evident is supplier awareness of price consciousness even with the added incentive that more buyers are in a buying mood. An example was provided last week at the Eastern States Materials Handling Show in Philadelphia. Many exhibitors were exhilarated by stacks of inquiries and requests for product data at their exhibition booths; but at the same time they were keenly aware that buyer interest in price was prominent along with other factors that influence purchasing decisions—quality, service, and over-all efficiency and cost-reduction potential.

In their search for improved quality, new products, and wider avenues to cost reduction, aggressive purchasing managers are urging buyers to turn the tables on the salesmen and make visits to their plants. First-hand inspection of supplier capabilities can prove an enlightening factor in assessing purchasing problems and making the ultimate buying decision. But what to look for on a vendor plant visitation? Here's a brief guide supplied to Dallas area P.A.'s recently when they made a group visit to an area plant to inspect an automated setup:

- (1) Financial Structure—Credit rating, working capital, debts, profitable operations.
- (2) Organization—who is responsible for what?
  - A. Whom to contact to accomplish the most good. Methods used in quoting prices, discounts, deliveries.
  - B. Order processing & inventory control—systems used, adequacy and efficiency.
  - C. Purchasing—meet the top man. Where does purchasing fit into the organization, what are its functions?
  - D. Production—control and scheduling. Quality control and quality consciousness. Reserve capacity and/or expansion possibilities. Material handling. Housekeeping. Maintenance and toolroom facilities.
- (3) Inventories—Raw materials: adequacy, where and how obtained. Finished goods: adequacy, handling, packaging.
- (4) Shipping Facilities—Own trucks? Dock space? What lines? Rail siding—what line?
- (5) Labor-Management Relations—Work stoppage record. Unionized? What union? Closed shop?

Buying note for P.A.'s in a hurry: An electric toothbrush that E. R. Squibb & Sons assures buyers will cut this early morning chore from the normal three minutes to a scant 45 seconds—and do a better job too. The brush has a 110-v. motor encased in a slim handle on which special brushes are mounted. Cost: \$19.75 and brushes are interchangeable so that all members of the family can join in the fun.

## ASA Okays Standards For Van-Size Containers

(Continued from page 1)  
opening the way to completing interchangeability between rail, highway and sea transport."

Copies of the new van container standard (MH 5.1-1961) are now available from the American Standards Assn., 10 East 40 St., New York 16, New York.

In addition to completing the container standards still under consideration, agreements on international containerization standards still must be arrived at.

European transport officials will meet in Vienna next October to decide on continental standards, and there is apprehension that their dimensions will coincide with the U.S. standards because of the problem of highway and rail clearances in Europe and the desire to reduce and limit road transport there.

Prior to the Vienna meeting however, application of international standards will be discussed in September at a meeting of a project committee of the International Organization of Standardization in New York.



## Kraft Folding Cartons in stock—64 sizes!

Send for FREE sample

You may find the solution to some of your packaging problems in our expanded line of stock kraft folding cartons.

Inventories of stock boxes are maintained in 64 sizes, ranging from 3/8" x 3/8" x 1" to 5 3/4" x 7". Buyers across the country are using them to package items ranging from electronic sub-assemblies, automotive and aircraft parts, to nursery products.

Stock boxes offer these special advantages:

**LOWEST PRICES** because of volume runs, standard fabrication.

**FAST SHIPMENT**—orders received before noon are shipped the same day.

**YOUR INVENTORY MINIMIZED**, because we keep the boxes until you need them.

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# Buyer Demands Forcing Distributors to Specialize

(Continued from page 1)  
can stock the 'general line' for a specific trading area," says ID, "except where industry is lightly settled. Most other companies, except for product specialists, are moving with the trend to key line selling or plan to head in that direction."

Service and delivery advantages long have overshadowed price considerations in the swing to the specialist who can supply items at the time and in the quantity needed. "Contract buying" from a specialist was aimed more at assuring a flow of materials than gaining a price advantage.

## Checking Buying Patterns

Now, more distributors are analyzing the buying patterns of their customers for areas where cost savings, based on their own volume buying, can be passed along.

"We're reaching a point where we can determine what a buyer's business is worth to us," said Clarence McDonald England, president of Logan Hardware & Supply Co., Logan, W. Va. "If it's over a certain collar volume, we'll have to say, we're ready to turn some of the profit back to you."

But the "shakedown cruise" that will determine the extent of a distributor's specialization is far from over. "We're always on the lookout for additional lines that our customers would like us to put in," says England.

Thus, many specialists find themselves straddling several lines. A key example: Bearings distributors are finding other distributors with specialties of their own taking on bearings in response to demands of buyers who want a nearby source of supply.

## 'Forced Draft' Trend

"It's a forced draft trend," said Howard Begg, president of Alban Corp.'s Squire, Schilling & Skiff, Newark, N. J. "There are too many product lines, even in a single industry, for the industrial seller not to specialize."

Electronics and paper industries are the newest fields in which buyers and manufacturers are accelerating the "forced draft" toward specialization.

Scott Paper Co. has been urging its distributors to specialize in order to provide more service to buyers of other than large quantity newspaper paper.

Electronics distributors are rushing into industrial specialization with the help of manufacturers. "The recent trend has been toward more and more such specialization," said Robert L. Jannen, director of sales and marketing for the Leach Corp., Los Angeles electronics manufacturer.

"The electronic distributor of 1961," he said, "is quite different from the distributor of 1951 who found it impossible to stock everything his customers required and started stocking only the most popular items. This brought many customers, who needed specialized items in small quantities back to the manufacturer." Most of these distributors are now making up for lost ground to put themselves on an equal footing with the distributor who continued to specialize.

Other rapidly growing fields of

considerable specialized distribution are:

• **Industrial rubber.** Long an area of specialized distributors, changes in industrial buying patterns have put the rubber specialist into protective clothing, conveyors, and industrial glove lines, as well as plastic valves and fittings.

• **Plastics.** One group of distributors in this category handles raw materials, in some cases distributing nationally. Another group handles plastic products.

The buyer is dictating what the plastics product distributor will carry in his line. Many pipe and valve rubber specialists have converted their rubber specialties to plastics so, in effect, the plastic distributor is usually specializing in two lines.

For example, an industrial rubber distributor in West Virginia has increased his plastics lines over the past four years to the point that 80% of his hose and fittings are now plastic.

• **Chemicals.** As chemical suppliers turn out more products in small lots, distributors have moved into the chemical field. At present, 20% of the total volume of chemical sales is made via distributors, who compete on an area-by-area basis with chemical brokers who cover large areas.

• **Precision tooling components.** Automation in metalworking industries has developed this category of distributor. Electronic testing apparatus, jigs, and fixtures head his list of specialties.

• **Instrumentation specialists.** This breed of distributor started off a few years ago specializing in mechanical gages, but the increase in fluid process plants has led him to specialize in components, such as measuring and inspection devices, which go into processing systems.

Paint, finishings, and insulation are other fields in which distributors are breaking fresh ground.

## Copper, Brass Price Increases Shake Up Tags on End Products

(Continued from page 1)  
than another cent a pound, or if brass ingot goes up again, we'll have to raise our tags."

Many plumbing people don't think that the brass trap tubing increase will hold, although they agree it would create strong upward price pressure if it does.

Some brass mills haven't gone along," commented an industry expert, "and I think import competition will force prices back down. Otherwise we'll all end up where we were several months ago with domestic firms buying heavily from foreign companies."

Foreign competition also may play a role in copper water tubing prices which brass mills raised last week. "We'll have to wait and see what foreign companies do about our new price schedules," said a spokesman for one big Eastern mill. "We're entering the season when foreign competition picks up. A lot depends on whether the domestic demand surge is really due to better business or whether buyers are just building up inventories in a strengthening price situation."

Bridgeport Brass initiated the copper water tubing hike by elim-

inating a 3% discount from list and publishing new prices, reflecting the 1¢/lb. increase in copper tags. For some coil tubing Bridgeport also eliminated the 5% discount that wholesale distributors still get for other items on the revised list.

Other brass mills followed Bridgeport's lead in cutting out the 3% discount, but posted differing prices on a number of items.

"Copper water tubing prices are ranging all over the lot," said one brass mill executive. "We're waiting for the dust to settle so we can find out just what happened."

Pricing problems are also plaguing industrial valve and fitting producers and foundries which make brass castings for a wide range of industrial uses.

"We're passing on our cost increases for heavy castings and other castings where our margin is low," said F. Dardani, production manager for Atlas Foundry. "Generally speaking we find that except in a few cases like instrument castings we can't absorb our increased costs and still maintain high quality standards."

## Late News in Brief

### Price of Plasticizers Cut

**New York**—Reductions of 2¢ to 4¢/lb. were made on four types of alcohol used in making plasticizers. The four types and their new tankcar prices are Hexyl alcohol, 17¢/lb.; isooctyl and isodecyl, 18¢; tridecyl, 20¢. Companies making the cuts were Enjay Chemical Co., Union Carbide Chemicals Co., and Gulf Oil Co.'s Petrochemicals Div.

### Raytheon Cuts Transistor Tags

**Lexington, Mass.**—Raytheon Co. cut prices on 18 silicon subminiature transistors 6%-41% for volume purchases of 100 to 999. Seven double-ended types are priced from \$9.95 to \$15 each, down from \$10.21 to \$24.46. Single-ended equivalents of these types are priced from \$8.70 and \$13.65.

### Raymond Unveils New Bag

**Middletown, Ohio**—A multiwall shipping sack with a polyethylene bag sewn inside was introduced by Raymond Bag Corp. The seamless tube, heat sealed above the sewn line, is designed to add protection of polyethylene to the strength of multiwall.

### GSA to Buy Nonmilitary Items

**Washington**—Nonmilitary items needed by the Defense Dept. will be purchased from now on by the General Services Administration. Aim is to get standard prices on items and to stock them for immediate delivery when needed. Now under way is a review of 30,000 items not requiring military control.

### Microbore Posts Price Cuts

**Royal Oak, Mich.**—Price reductions of up to 20% on throwaway type cemented carbide metal cutting inserts, were announced by Microbore Div. of Devlieg Machine Co. The reductions, which vary by grade, apply to carbide shims, chip breakers and other throwaway inserts.

## DuPont Develops Versatile Chemical

(Continued from page 1)

• **Water Dispersible.** The chemical disperses and swells up in water to form a stable colloid.

• **Fibrillar Particles.** Tiny fibers in colloidal solution of the chemical will lie flat and interlace to form a film when the solution is dried on a surface.

• **Positive Charge.** Water solution assumes a positive charge which attaches itself to negative surfaces such as glass, paper, and clay, completely changing their surface from negative to positive.

• **Hydrophilic and Organophilic.** Since it is wet by both water and certain organic liquids, the chemical can act as an emulsifier as well as a thickening, dispersing and suspending agent in both water and water-alcohol systems.

• **Low Toxicity.** (DuPont has

filed with the FDA to obtain clearance for cosmetic and pharmaceutical uses.)

Textiles treated with Baymal will be highly resistant to stains and dirt, in addition to being water repellent, according to DuPont. Treatment with the chemical also will make dyeing easier and reduce stretching of knitted wear.

Baymal can be mixed with water and sprayed or painted onto other materials to make them heat resistant. A thin film on firebrick, for example, raises the brick's temperature resistance over 500F, while fiber glass treated with the solution is six times more heat-resistant than nontreated glass.

Paint containing the chemical can be sprayed on almost any surface without dripping. Solutions containing Baymal will stick to glass, paper, cellophane, and other hard-to-paint surfaces.

Cutting tools may be manufactured from Baymal by compressing the chemical under 4,000 psi. pressure. Test bars which appear very fine grained and have a modulus of rupture as high as 65,000 to 100,000 psi. at ordinary temperatures have been made in the laboratory it was reported.

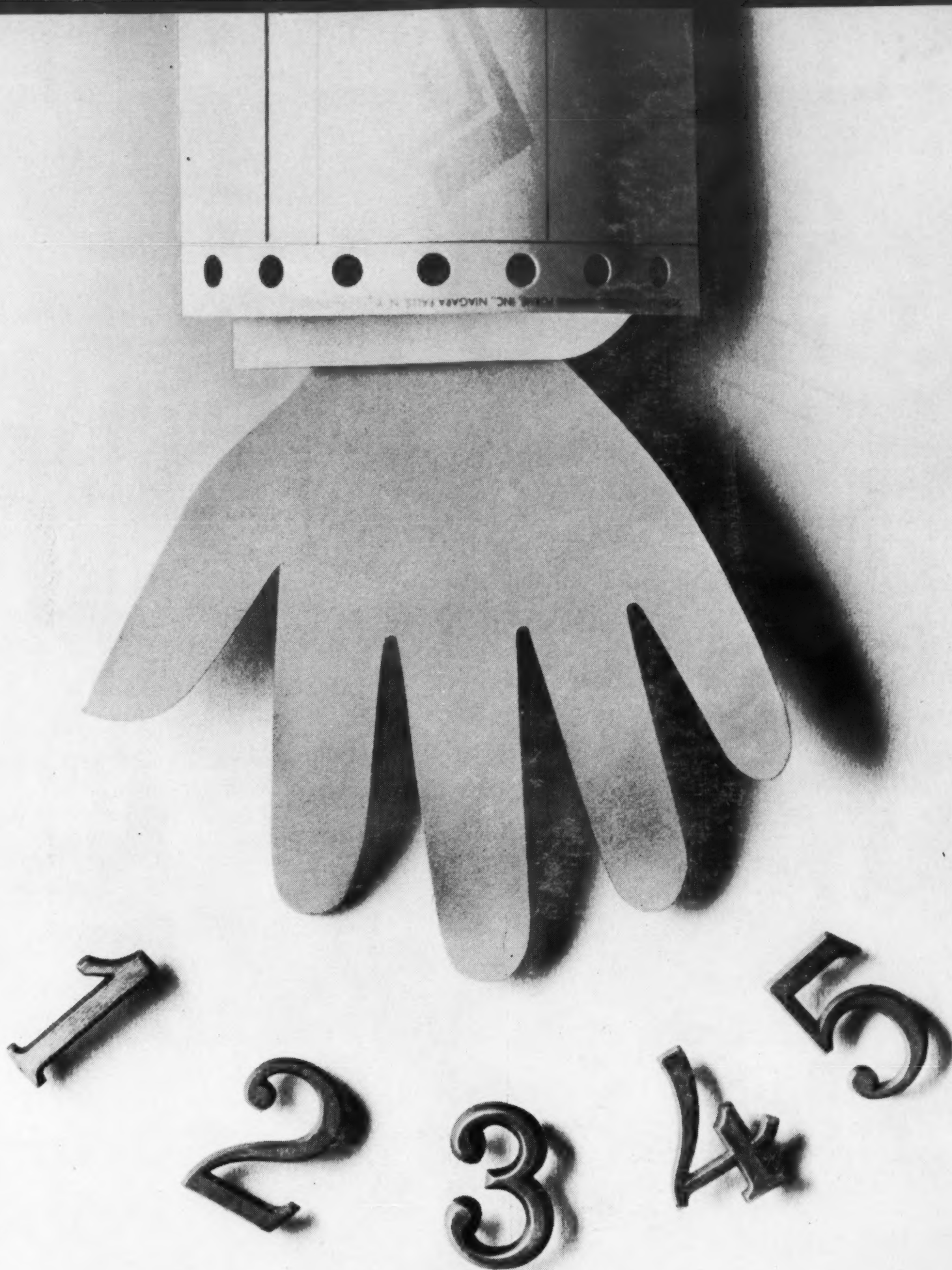
A limited number of 1-lb. samples are being made available to potential users free of charge and larger quantities are being sold at \$3.50/lb. This base price is expected to be sharply reduced when commercial production facilities are completed.

Costs for developing Baymal exceeded \$2-million according to DuPont. The product has been in research and development for 15 years and studies will continue until the full-scale plant is under-way.

## Price Changes for Purchasing Agents

Item & Company	Amount of Change	New Price	Reason
<b>INCREASES</b>			
Gasoline, Esso, N. Y., dlr., tankwgn., gal.	.002-.032	....	price restoration
Tin salts, potassium stannate, lb.	.008	.318	metal increase
Sodium stannate, lb.	.01	.682	metal increase
Tin crystals, anhyd., lb.	.01	\$1.056	metal increase
Copper oxide, black, lb.	.01	.46	metal increase
Copper sulfate, monohydrated, crlts., cwt.	.35	\$23.00	metal increase
Copper carbonate, crlts., cwt.	.55	\$34.90	metal increase
Cupric chloride, dihydrate, crlts., lb.	.005	.0325	metal increase
Anhydrous, crlts., lb.	.005	.44	metal increase
Dried crystal, crlts., lb.	.005	.3825	metal increase
Cuprous chloride, crlts., lb.	.007	.3925	metal increase
<b>REDUCTIONS</b>			
Fir plywood, 1/4" sanded, 1000 sq. ft.	\$4.00	\$68.00	overproduction
Menthol, Brazilian, lb.	.05	\$7.85	
Tobias acid, 5,000-19,999 lb.	.025	.815	
Triacetin, Eastman, tanks, lb.	.01	.355	competition
1,2,6-hexanetriol, Union Carbide, crlts., lb.	.295	.455	comm'l prod.
Transistors, silicon subminiature, Raytheon, 100-999...	6%-41%	....	prod. econs.





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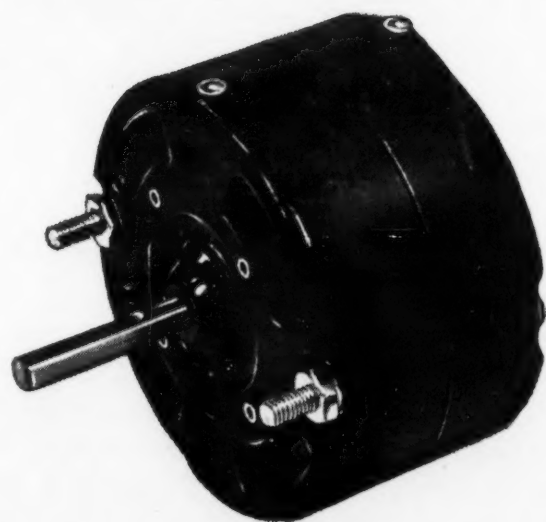


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